Grief and the Search for Meaning: The Role of Merged Identity and Identity Disruption

By

Melissa Badia, LMHC, LPC, NCC

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ABSTRACT

The death of a loved one may have a profound effect on one’s sense of self and purpose in life. This loss may impact one’s identity and challenge previous goals and aspirations. The Cognitive Attachment Model attempts to understand grief by integrating core factors from the self-memory model, narrative approaches, and attachment theory (Conway & Pleydell-Pearce, 2001). According to this model, modification and adjustment of merged identity to incorporate the loss and, therefore, establish new goals, life roles, and attachments is integral to managing bereavement (Maccallum & Bryant, 2013). The purpose of the proposed research is to examine the role of merged identity as defined by the Cognitive Attachment Model (merged vs. independent) on the development of grief symptoms. Specifically, this study examines (1) if a merged identity might be an important factor in predicting the experience of grief, (2) whether those with merged identity have more identity disruption after a loss, (3) how merged identity impacts an individual’s ability to integrate a loss, and (4) whether the relationship between merged identity and grief is mediated by meaning integration and identity disruption, sequentially. Results supported the hypotheses that merged identity can provide independent predictive value for grief above attachment style. This study also supported the argument that individuals with a more merged identity have both more difficulty integrating the loss into their meaning system and a more disrupted identity after the death of a loved one. Finally, there was support for a sequential mediational hypothesis where a chain reaction from merged identity, to poor integration, to disrupted identity, predicted more grief severity.

Keywords: grief, meaning, purpose, attachment, identity, bereavement, disruption
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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES AND FIGURES</td>
<td>vii</td>
</tr>
<tr>
<td>CHAPTER 1: INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>CHAPTER 2: LITERATURE REVIEW</td>
<td>5</td>
</tr>
<tr>
<td>Grief</td>
<td>5</td>
</tr>
<tr>
<td>Risk Factors for Developing Complicated Grief</td>
<td>8</td>
</tr>
<tr>
<td>Meaning Making</td>
<td>17</td>
</tr>
<tr>
<td>Meaning Making and Complicated Grief</td>
<td>25</td>
</tr>
<tr>
<td>Identity, Identity Salience, and Identity Disruption</td>
<td>30</td>
</tr>
<tr>
<td>Cognitive Attachment Model of Prolonged Grief</td>
<td>32</td>
</tr>
<tr>
<td>Purpose and Rationale</td>
<td>37</td>
</tr>
<tr>
<td>Research Questions and Hypotheses</td>
<td>39</td>
</tr>
<tr>
<td>CHAPTER 3: METHOD</td>
<td>44</td>
</tr>
<tr>
<td>Participants</td>
<td>44</td>
</tr>
<tr>
<td>Procedure</td>
<td>48</td>
</tr>
<tr>
<td>Measurements</td>
<td>48</td>
</tr>
<tr>
<td>Demographic Characteristics</td>
<td>49</td>
</tr>
<tr>
<td>Screening Questionnaire</td>
<td>49</td>
</tr>
<tr>
<td>Grief</td>
<td>50</td>
</tr>
<tr>
<td>Meaning Integration</td>
<td>50</td>
</tr>
<tr>
<td>Meaning in Life</td>
<td>51</td>
</tr>
<tr>
<td>Identity</td>
<td>52</td>
</tr>
<tr>
<td>Chapter</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Closeness</td>
</tr>
<tr>
<td></td>
<td>Attachment</td>
</tr>
<tr>
<td></td>
<td>Identity Disruption</td>
</tr>
<tr>
<td></td>
<td><strong>CHAPTER 4: RESULTS</strong></td>
</tr>
<tr>
<td></td>
<td>Descriptive Statistics</td>
</tr>
<tr>
<td></td>
<td>Research Question 1</td>
</tr>
<tr>
<td></td>
<td>Research Question 2</td>
</tr>
<tr>
<td></td>
<td>Research Question 3</td>
</tr>
<tr>
<td></td>
<td>Research Question 4</td>
</tr>
<tr>
<td></td>
<td>Research Question 5</td>
</tr>
<tr>
<td></td>
<td>Research Question 6</td>
</tr>
<tr>
<td></td>
<td>Research Question 7</td>
</tr>
<tr>
<td></td>
<td><strong>CHAPTER 5: DISCUSSION</strong></td>
</tr>
<tr>
<td></td>
<td>Summary of Results</td>
</tr>
<tr>
<td></td>
<td>Merged Identity and Grief</td>
</tr>
<tr>
<td></td>
<td>Anxious Attachment and Grief</td>
</tr>
<tr>
<td></td>
<td>Merged Identity, Identity Disruption, and Identity Continuity</td>
</tr>
<tr>
<td></td>
<td>Merged Identity and Meaning</td>
</tr>
<tr>
<td></td>
<td>Merged Identity, Meaning Integration, and Grief</td>
</tr>
<tr>
<td></td>
<td>Merged Identity, Identity Disruption, Identity Continuity and Grief</td>
</tr>
<tr>
<td></td>
<td>Merged Identity, Meaning Integration, Identity Disruption, Identity Continuity and Grief</td>
</tr>
<tr>
<td></td>
<td>Implications of Findings for Mental Health Counselors</td>
</tr>
<tr>
<td></td>
<td>Limitations and Suggestions for Future Research</td>
</tr>
<tr>
<td></td>
<td>REFERENCES</td>
</tr>
</tbody>
</table>
APPENDIX A: DEMOGRAPHIC CHARACTERISTICS 110
APPENDIX B: LIFE EVENTS QUESTIONNAIRE (LEQ) 111
APPENDIX C: PROLONGED GRIEF-13 (PG-13) 112
APPENDIX D: INTEGRATION OF STRESSFUL LIFE EVENTS SCALE (ISLES) 114
APPENDIX E: MEANING IN LIFE QUESTIONNAIRE (MLQ) 115
APPENDIX F: INCLUSION OF OTHERS IN THE SELF SCALE (IOS) 116
APPENDIX G: SUBJECTIVE CLOSENESS INVENTORY (SCI) 117
APPENDIX H: EXPERIENCES IN CLOSE RELATIONSHIPS-REVISED (ECR-R) 118
APPENDIX I: IDENTITY DISRUPTION 120
APPENDIX J: SELF-CONTINUITY INDEX 121

LIST OF TABLES AND FIGURES

Table 1. Frequency, Percentage, Mean, and Standard Deviation of Sample Demographics 47
Table 2. Correlation Table for Demographic and Main Study Variables 60
Table 3. Means and Standard Deviations for Correlation Table 2 61
Table 4. Hierarchical Regression Analysis Summary for Merged Identity Predicting Grief 63
Table 5. Hierarchical Regression Analysis Summary for Merged Identity Predicting Grief 64
Table 6. Hierarchical Regression Analysis for Merged Identity and Attachment Predicting Grief 64
Table 7. Hierarchical Regression Analysis for Merged Identity and Attachment Predicting Grief 66
Table 8. Hierarchical Regression Analysis Summary for Merged Identity Predicting Identity Disruption 67
Table 9. Hierarchical Regression Analysis for Merged Identity Predicting Identity Continuity 68

Table 10. Hierarchical Regression Analysis Summary for Merged Identity Predicting Meaning Integration 69

Table 11. Hierarchical Regression Analysis Summary for Merged Identity Predicting Meaning in Life 69

Figure 1. Mediation Model for the Relationship Between Merged Identity and Grief as Mediated by Meaning Integration 71

Figure 2. Mediation Model for the Relationship Between Merged Identity and Grief as Mediated by Identity Disruption 72

Figure 3. Mediation Model for the Relationship Between Merged Identity and Grief as Mediated by Identity Continuity 73

Figure 4. Sequential Mediation Model for the Relationship Between Merged Identity and Grief as Mediated by Meaning Integration and Identity Disruption 75

Figure 5. Sequential Mediation Model for the Relationship Between Merged Identity and Grief as Mediated by Meaning Integration and Identity Continuity 76
CHAPTER 1

INTRODUCTION

Although death and grief are unavoidable aspects of life, most bereaved individuals are able to cope with the loss of a loved one (Neimeyer & Thompson, 2014). Most grieving individuals return to normal daily functioning within the first 2 years following the loss (Neimeyer, Burke, Mackay, & Stringer, 2010). However, about 10-15% of bereaved individuals do not return to daily functioning and, instead, suffer from prolonged and complicated grief (Neimeyer & Thompson, 2014; Boyraz, Horne, & Waits, 2015). Complicated grief is characterized by feeling a loss of purpose and hope for the future following the death of a loved one. Furthermore, complicated grief can be associated with confusion regarding one’s role in life (Neimeyer et al., 2010). It may involve an intense yearning for the deceased loved one and trouble moving forward with life after the loss (Thimm & Holland, 2016).

The death of a loved one can really bring to question all of the preexisting worldviews and beliefs of an individual. The incongruence of the death and the values one once held can cause tremendous distress, often leading to prolonged grief if not managed (Neimeyer & Thompson, 2014). The death of a loved one may challenge fundamental assumptions, which may influence the individual to begin searching for meaning. This can lead to both positive and negative responses. This may depend on the individual’s ability to integrate the loss into a broader meaning system (Boyraz et al., 2012). The ability to integrate a loss experience into the bereaved’s meaning system has been associated with reductions in complicated grief for individuals experiencing other forms of trauma and transition (Holland, Currier, Coleman, & Neimeyer, 2010).
In the current literature, several definitions of meaning have emerged. However, the process by which one makes meaning after the death of a loved one has not been fully explicated (Gillies, Neimeyer, & Milman, 2015). Meaning reconstruction has been defined as a process of changing and adapting the self-narrative (Neimeyer & Thompson, 2014). Meaning reconstruction occurs at various levels, including personal, biological, and interpersonal (Neimeyer, Klass, & Dennis, 2014). Meaning making involves searching for a way to make sense of the loss, to understand why it occurred, to determine what the loss means within our lives, and to decide how the loss will fit into our current narratives (Gillies & Neimeyer, 2006). This may require the individual to relearn or reproduce his self- and worldviews (Neimeyer & Thompson, 2014). Constructivist theory is a model that emphasizes meaning reconstruction as a means of coping with grief. It suggests that we need to impose meaning on life experiences (Neimeyer et al., 2010).

In this theory, individuals are motivated to construct and maintain meaningful self-narratives. Specifically, our personal identity and sense of self is established by the stories we create about ourselves and share with others. According to constructivists, people engage in three activities in order to reconstruct meaning: sense-making, benefit-finding, and identity-change. In order to adapt to a loss, one must continuously attempt to construct a new reality because their assumptive worlds have been forever changed (Gillies & Neimeyer, 2006). Sense-making has been defined as the ability to comprehend the loss and find an explanation for the experience. This involves incorporating the loss into our preexisting worldviews (Bogensperger & Lueger-Schuster, 2014). Benefit-finding, on the other hand, involves uncovering positive personal or social consequences
of the loss (Holland, Currier, & Neimeyer, 2006; Bogensperger & Lueger-Schuster, 2014). This may involve learning about one’s strengths and understanding the significance of various relationships in one’s life (Boyraz et al., 2010).

It is not difficult to imagine that the loss of a loved one can have a profound effect on one’s sense of self. Additionally, research suggests that individuals who maintain continuity in identity are more resilient to loss (Bonanno, Papa, & O’Neill, 2002). Identity theory posits that one’s self-concept is made up of multiple identities that characterize one’s response to environmental demands (Papa & Lancaster, 2015). Threats to these identities might be associated with identity disruption or issues adjusting, especially if the threatened identities are more salient. Therefore, the loss of a salient role (i.e., parent, sibling) may underlie the phenomenology of loss (Papa & Lancaster, 2015).

According to attachment theory, the self can be partially conceptualized through close relationships and expectancies of positive regard (Papa & Lancaster, 2015). These expectancies and support systems are maintained through consistent interaction with various attachment figures. Furthermore, individuals create working mental representations, or schemas, consisting of their relationships with significant people in their lives (Maccallum & Bryant, 2013). Shear and Shair (2005) suggest that after a loss, we struggle with the mismatch between the schema of the attachment figure being present and the reality of their death. One model that was created based off of previous identity theories, including attachment theory and Conway and Pleydell-Pearce’s model (2000), is the Cognitive Attachment Model. This model attempts to understand bereavement by integrating core factors within the self-memory model, narrative approaches, and attachment theory. According to this model, the integral task during
bereavement is the modification and adjustment of merged identity to incorporate the loss and, therefore, enable the establishment of new goals, life roles, and attachments independent of the deceased (Maccallum & Bryant, 2013). In the Cognitive Attachment Model, the main difference between someone who develops prolonged grief and someone who does not is the degree to which their sense of self is built around the deceased. Specifically, this model suggests that those whose identity is more entwined with the deceased will be at greater risk for the development of prolonged grief (Maccallum & Bryant, 2013).

There are two forms of identity based on the individual’s level of separation from the deceased: merged and independent (Maccallum, & Bryant, 2013). Individuals with a merged identity are those whose identity is constructed around the deceased, while an independent identity is created separately from the deceased. An independent identity does not signify that the deceased was unimportant to the bereaved, but instead suggests that the individual has goals, motivations, and self-perceptions that are not entirely based on the deceased. These forms of identity are placed upon a continuum ranging from completely merged to entirely independent (Maccallum, & Bryant, 2013). According to the Cognitive Attachment Model, the degree to which one’s identity is merged with the deceased is more integral in the development of prolonged grief than an individual’s preexisting attachment style (Maccallum, & Bryant, 2013). Although this model has received some preliminary support in the literature, there still remains questions as to how identity influences the grief process.

The purpose of the proposed research is to examine the role of merged identity as defined by the Cognitive Attachment Model (merged vs. independent) on the
development of complicated grief. Specifically, this study examines (1) if a merged identity might be an important factor in predicting the experience of prolonged grief, (2) whether those with merged identity have more identity disruption after a loss, (3) how merged identity impacts an individual’s ability to integrate a loss, and (4) whether the effects of merged identity on grief are impacted based on an individual’s preexisting attachment style.

CHAPTER 2
LITERATURE REVIEW

Grief

Death is an unavoidable aspect of life that is associated with various levels of distress; however, most bereaved individuals are able to cope with the loss of a loved one (Neimeyer & Thompson, 2014). Although grief often has significant physical, emotional, and social ramifications, most grieving individuals return to normal daily functioning within the first 2 years following the loss (Neimeyer et al., 2010; Shear, 2015). According to Bonanno, Westphal and Mancini (2011), about 45-60% of grieving individuals return to normal functioning within a few months; this response is known as resilience. Approximately 15-25% of griever experience more moderate symptoms, which tend to resolve within a year; this response is known as recovery. Furthermore, a subset of bereaved individuals actually show improvement in functioning after a loss, such as in caregivers who are relieved of certain responsibilities after the death of an ill loved one (Neimeyer et al., 2010).

Research suggests that most individuals are able to manage grief symptoms without the help of a professional and that grief counseling is not particularly beneficial for this population (Bonanno et al., 2011; Neimeyer et al., 2010). However, about 10-15% of
bereaved individuals do not return to daily functioning and, instead, suffer from prolonged and complicated grief (Neimeyer & Thompson, 2014; Boyraz et al., 2015; Bonanno et al., 2011). These individuals are most likely to benefit from grief therapy as their symptoms are more severe and continue over a longer period of time. The objective of complicated grief treatment is to restore daily functioning and to assist the individual in accepting and integrating the loss (Shear, 2015).

Complicated grief, or prolonged grief, is characterized by feeling a loss of purpose and hope for the future following the death of a loved one. Furthermore, complicated grief can be associated with confusion regarding one’s role, as the death of a loved one can bring into question many of our basic assumptions of life (Neimeyer et al., 2010; Shear, 2015). This may involve an intense yearning for the deceased and incredible difficulty moving forward with life after the loss (Thimm & Holland, 2016). Also, the individual may have recurring thoughts and memories of the deceased and difficulty accepting the loss and its implications (Shear, 2015). In one study, prolonged grief was associated with emotional numbness and meaninglessness (Maccallum & Bonanno, 2017).

Although there are high comorbidity rates, complicated grief is distinguishable from anxiety, depression, and posttraumatic stress disorder (PTSD). Some researchers have suggested that complicated grief be included as its own diagnosis in the DSM (Shear, 2012; Shear, 2015). Although a new diagnosis was not developed, the DSM-5 included updates and developments in terms of the conceptualization and diagnosis of complicated grief. Specifically, the bereavement exclusion for Major Depressive Disorder (MDD), which previously prohibited clinicians from diagnosing individuals who had suffered a
loss with MDD for the first two months following the death (Varley, 2013). Although a new disorder was not created, the DSM-5 lists Persistent Complex Bereavement Disorder (PCBD) as a diagnosis that has not been formally adopted, but warrants further research (Varley, 2013). If adopted, a diagnosis of PCBD would indicate that the individual was suffering from debilitating grief, which would be characterized by an exclusive focus on the death and a loss of interest in all other areas of life.

Complicated grief has been shown to have long lasting effects that go beyond normal grieving. In one longitudinal study of bereaved individuals who had lost a loved one due to cancer, results suggested that the participants were still experiencing substantial difficulty in relation to the loss 3-5 years later (Kim, Carver, Spiegel, Mitchell, & Cannady, 2017). It is common for bereaved individuals to suffer from depressive and elevated distress symptoms up to 6-months post loss, but a subset of the population that develops prolonged grief is suffering intensely for much longer (Kim et al., 2017). In another longitudinal study looking at loss after a tsunami, a small portion of individuals developed complicated grief, which is consistent with the literature. However, those who did develop complicated grief continued to be symptomatic even 6 years after the loss (Kristensen, Weisaeth, Hussain, & Heir, 2014). Complicated grief has also been associated with long-term sleep disturbances, suicidal thinking, substance use, and increased risk for cardiovascular disease and cancer (Shear, 2015). These studies outline how complicated grief has a longer lasting effect as compared to normative grief reactions. Therefore, further research on the phenomenology and factors associated with grief symptoms and severity is warranted.
Risk Factors for Developing Complicated Grief

There are several identified risk factors for the development of complicated grief, including low social support, high spousal dependence, and previous losses (Thimm & Holland, 2016). The cause of death may be another risk factor that might impact how an individual manages grief symptoms, specifically in the case of violent and unexpected deaths. Research suggests that individuals who experience more violent losses (e.g., murder, car accident, etc.) report more difficulty adjusting after the death (Boyraz, Horne, & Sayger, 2012). Losses related to natural disasters are considered both sudden and violent and have been associated with long-term detrimental effects (Kristensen et al., 2014). Similarly, those who experience the loss of a child often report significantly more grief symptoms for a longer period of time as this is often unexpected and feels unnatural (Boyraz et al., 2015; Lichenthal, Currier, Neimeyer, & Keese, 2010). The prevalence of complicated grief is about 10-20% for those who lose a spouse or romantic partner and is even higher for parents who lose a child/children, as compared to the loss of a parent, grandparent, sibling, or friend (Shear, 2015). Gender and age have also shown to be strong predictors of complicated grief; women and those over the age of 60 are more likely to develop prolonged grief (Shear, 2015). Aside from this, other risk factors include a history of anxiety or mood disorders, previous substance use, and prior losses (Shear, 2015).

There are several person-centered factors related to grief symptomatology. One of these factors is attachment style. Attachment theory posits that we have a set of
biologically based behaviors that are activated in times of threat, which leads us to establish or maintain proximity to an attachment figure (Field, Gao, & Paderna, 2005). According to attachment theory, the self can be partially conceptualized through close relationships and expectancies of positive regard (Papa & Lancaster, 2015). These expectancies and support systems are maintained through consistent interaction with various attachment figures. Furthermore, individuals create working mental representations, or schemas, consisting of their relationships with significant people in their lives (Maccallum & Bryant, 2013). The death of an attachment figure is the biggest threat to the relationship, which can trigger a host of maladaptive coping strategies (Neimeyer, Baldwin, & Gillies, 2006; Bonanno et al., 2001).

Early childhood attachment patterns may be associated with grief reactions, especially in how the individual configures the meaning of the loss (Gillies & Neimeyer, 2006). Children develop this bond with primary caregivers, with the quality of these relationships varying based on the individuals. Although we often speak of these attachment figures as stemming from childhood, Field et al. (2005) suggests that adult attachment relationships are also critical for emotion regulation and can often serve as a coping resource in times of stress. Therefore, the loss of an adult attachment figure can lead to serious consequences for some grievers. Furthermore, the loss of a loved one may undermine the individual’s sense of self and life fulfillment. The loss may even impact basic daily functioning, predisposing the individual to prolonged and complicated grief (Gillies & Neimeyer, 2006).

According to Bowlby (1980), bereavement elicits anxiety and other maladaptive behaviors in an attempt to maintain or reestablish a connection with the deceased.
Furthermore, he suggested that in the course of normal bereavement, an individual’s distress and search for the attachment figure will diminish over time as the bereaved gradually accepts the permanence of the loss and begins to establish new goals. This attachment system may play a role in emotion regulation; it is activated during stressful times to enable coping. Therefore, the loss of an attachment figure may undermine an individual’s pre-existing schemas, which in turn may result in more difficulty adapting to a loss (Papa & Lancaster, 2015). Shear and Shair (2005) suggest that after a loss, we struggle with the mismatch between the schema of the attachment figure being present and the reality of their death. It is suggested that grief symptoms resolve once the permanence of the loss becomes integrated into a new attachment schema (Maccallum & Bryant, 2013).

Bowlby (1980) outlined two insecure attachment styles: anxious and avoidant. An anxious attachment style is characterized by excessive monitoring of the availability of attachment figures. Anxious attachment refers to one’s perception of the availability of attachment figures in times of stress (Maccallum & Bryant, 2013). Specifically, research has suggested that an anxious attachment style is linked to greater and more persistent grief symptoms (Mancini, Sinan, & Bonanno, 2015). In another study, Field and Sundin (2001) found that greater relational dependency, a feature of anxious attachment, was associated with worse outcomes during the grieving process. Those who are high in attachment anxiety are likely to be overly dependent and doubt their ability to handle stressors (Maccallum & Bryant, 2013).

Alternatively, an avoidant attachment style is characterized by the maintenance of independence and the avoidance of closeness. Avoidant attachment refers to the degree to
which a person mistrusts an attachment figure and their ability to alleviate stress (Shear & Shair, 2005). Fraley and Bonanno (2004) found that attachment avoidance was also associated with poorer adjustment over time. Research on this attachment style have shown mixed results; some indicate more resiliency after a loss while others display elevated grief symptomatology (Mancini et al., 2015). In another study with 195 bereaved participants, both attachment anxiety and avoidance were positively correlated with complicated grief (Currier, Irish, Neimeyer, & Foster, 2015). Those who are high in avoidant attachment are likely to withdraw from close relationships. Individuals with either form of insecure attachment are more at risk for the development of emotional issues. Moreover, individuals high on both anxious and avoidant attachment fare the worst (Maccallum & Bryant, 2013). Attachment style has received a lot of attention in the grief literature, and continues to be an important factor to consider.

A second person-centered risk factor in the development of prolonged grief is interpersonal dependency. Interpersonal dependency can be both adaptive and maladaptive, and has been defined as the tendency to look for guidance, support, and nurturance from those close to the individual even in situations that warrant autonomous functioning (Denckla, Mancini, Bornstein, & Bonanno, 2011). The adaptive form of interpersonal dependency has been associated with the subset of grievers whose symptoms resolve within a few months. The more maladaptive form was associated with prolonged grievers (Mancini et al., 2015).

Bornstein et al. (2003) outlined three forms of dependency: healthy dependence, destructive overdependence, and dysfunctional detachment. Healthy dependency is adaptive and is characterized by flexibility, mindfulness, and the ability to seek support
that strengthens interpersonal connections. Destructive overdependence is maladaptive and is characterized by indiscriminate, non-reciprocal dependence that can lead to various interpersonal difficulties. Dysfunctional detachment is also maladaptive and is characterized by difficulty maintaining social connections and relying on others for constant help. Differences in dependency have been associated with differences in adjustment to loss (Stroebe, Schut & Stroebe, 2007). Maladaptive dependency has also been associated with depression, eating disorders, and anxiety disorders (Denckla et al., 2011).

Two person-centered factors that have been associated with bereavement reactions and stress response are ego resiliency and self-enhancement (Mancini et al., 2015). Ego resiliency is characterized by behavioral flexibility, positive affect, and the capacity to recover from stress. Ego resiliency has been linked to stress resistance, which can play a role in the resolution of grief symptoms. Self-enhancement is defined as the tendency to perceive the self in unrealistically favorable terms. Self-enhancement has shown to be adaptive as it tends to promote well-being and effective coping (Bonanno, Rennicke, & Dekel, 2005). People who are high in self-enhancement are more likely to cope adaptively with bereavement (Mancini et al., 2015). One study examined resiliency outcomes of high-exposure survivors of the 9-11 terrorist attacks (Bonanno et al., 2005). Results suggested that self-enhancement was more prevalent amongst the individuals who were more resilient to the terrorist attack. Self-enhancers were able to return to a normal level of functioning relatively quickly (Bonanno et al., 2005).

An individual’s ability to regulate his emotions may also play a role in the development of complicated grief (Gupta & Bonanno, 2011). Emotions serve an
evolutionary purpose in that they assist us in facilitating adaptation to changing environments (Coifman & Bonanno, 2010). Furthermore, emotions allow us to meet the constant changing demands of daily living. Difficulties with emotion regulation have been linked to various forms of psychopathology. It is widely assumed that emotions were developed to promote survival by communicating intent and experience to others when faced with adversities. One form of emotion regulation that has received attention is context sensitivity (Coifman & Bonanno, 2010). Context sensitivity refers to one’s ability to express emotions that are appropriate in regards to the current situation/environment (Coifman & Bonanno, 2010). When emotions are displayed in an inappropriate context or indiscriminately, they may be maladaptive (Gupta & Bonanno, 2011). In regards to bereavement, individuals who had initial elevated levels of depression were less likely to show improvements at 18-months post-loss if they had failed to modulate negative emotions. On the other hand, those who showed more context sensitive emotion had decreased depressive symptoms 12-months post-loss (Gupta & Bonanno, 2011). This suggests that the inability to regulate emotions after the loss of a loved one may be linked to elevated grief symptoms.

Related to emotional regulation, expressive flexibility may also have some implications in regards to the development of prolonged grief. Expressive flexibility refers to both the enhancement and suppression of emotions as a means of behavioral modulation of emotional responses (Gupta & Bonanno, 2011). There are costs and benefits to the enhancement and suppression of emotions based on the context. The ability to modulate emotional expression flexibly seems to be important for adjustment to aversive events. Since the loss of a loved one is often coupled with a mix of intense
emotional reactions, it is easy to imagine why expressive flexibility might be particularly important in coping with the loss. In a study by Gupta and Bonanno (2011), results suggested that individuals suffering from complicated grief were less able to enhance and suppress their expressions of emotions flexibly. In another study, conducted post 9-11, participants viewed one of two films and measurements were taken afterwards for Duchenne smiles, a smile indicative of genuine positive emotion (Papa & Bonanno, 2008). Those who were able to smile after the distressing tape showed long-term reductions in stress. This indicates that the ability to express genuine positive emotions after distressing events can lead to better long-term outcomes (Papa & Bonanno, 2008).

Another identified risk factor for developing complicated grief is the individual’s attitude toward death. According to Wong, Reker and Gesser (1994), death acceptance is based on two components: cognitive awareness of one’s mortality and the emotional response to this awareness. Our attitudes and beliefs regarding death begin to develop from a young age (Boyraz et al., 2015). Furthermore, these attitudes seem to be associated with well-being and meaning in life (Boyraz et al., 2015). Wong et al. (1994) conceptualized death acceptance attitudes into three different dimensions: neutral acceptance, approach acceptance, and escape acceptance. Neutral acceptance refers to viewing death as being a natural part of life. Moreover, individuals with this attitude perceive death as being an inevitable aspect of life that should not be feared nor welcomed (Boyraz et al., 2015). Approach acceptance refers to individuals who perceive death as being the beginning of a happy afterlife (Wong et al, 1994). This often develops through religiosity and spirituality. Finally, escape acceptance refers to those who view death as an escape from suffering. This attitude often results from intolerable living
conditions, which influences the individual to perceive death as an attractive alternative to living (Boyraz et al., 2015). Those who endorse this attitude tend to have a stronger fear of living under specific conditions than a fear of death (Wong et al., 1994). Although conceptually the three dimensions seem tied to how an individual grieves, research has thus far only shown a link between neutral acceptance and grief (Boyraz et al., 2015). Specifically, those who endorse neutral attitudes toward death report less grief symptoms. This suggests that the attitudes one develops throughout his life in regards to death may impact how he grieves in the future.

Although some suggest that loss may be associated with the creation of negative worldviews, others argue that preexisting negative schemas may be activated after the death of a loved one (Thimm & Holland, 2016). Schemas are developed based on past experiences and are comprised of abstract representations that one uses to guide the organization and processing of new information (Young, Klosko, & Weishaar, 2003). Specifically, these schemas are primarily developed due to toxic or traumatic childhood experiences. In relation to grief, Thimm and Holland (2016) suggest that early maladaptive schemas (EMS) are integral in the development of complicated grief. EMSs are part of one’s negative belief system or meaning structure, which develop early in life and are used to understand and make sense of life experiences. Eventually, EMSs are integrated into an individual’s identity and become very resistant to change. Some researchers have argued that a loss may actually confirm and possibly strengthen these preexisting negative beliefs about the self and the world, which would impact the grieving process (Thimm & Holland, 2016). Young et al. (2003) argue that in order for a
person to cope with grief, they must differentiate the past and present in order to determine necessary changes in the schemas.

EMSs fall across various domains, which may differentially impact an individual’s ability to cope with stressful situations. In regards to bereavement, the schemas of self-sacrifice, abandonment, and vulnerability to harm seem to be most associated with the development of complicated grief (Young et al., 2003). Self-sacrifice is defined as placing excessive focus on assisting others regardless of the toll it takes on one’s own needs. In the context of bereavement, those who score high in this domain may sacrifice their own needs in relation to grief in order to help others affected by the death. Abandonment is defined as the expectation of losing significant attachment figures. Vulnerability to harm refers to the assumption that a catastrophe is going to occur. One study (Thimm & Holland, 2016) found that self-sacrifice was the strongest individual predictor of complicated grief. Furthermore, self-sacrifice and vulnerability to harm were predictive of difficulty with meaning making. Overall, higher levels of negative schemas were associated with less integration, which in turn was associated with more complicated grief symptoms. This supports the notion that integration serves as a mediator between negative schemas and complicated grief (Thimm & Holland, 2016).

For some, the death of a loved one can bring to question all of the preexisting worldviews and beliefs an individual held. The incongruence of the death and the values one once held can cause tremendous distress, often leading to prolonged grief if not managed (Neimeyer & Thompson, 2014). The death of a loved one may challenge fundamental assumptions, which may influence the individual to begin searching for meaning. This can lead to both positive and negative responses. This may depend on the
individual’s ability to integrate the loss into a broader meaning system (Boyraz et al., 2012). Therefore, it is argued that an important aspect of the grieving process is the ability to make or find meaning in the event. Considering the previous research on the risk factors for developing more severe or prolonged grief symptoms, there are reasons to believe meaning making plays a role in the resolution of these symptoms.

**Meaning**

In the current literature, several definitions of meaning have emerged. However, the process by which one makes meaning after the death of a loved one has not been fully explicated (Gillies, Neimeyer, & Milman, 2015). This is partially due to the lack of agreement in operationalization of meaning, which has impacted researchers’ ability to conceptualize the relationship between grief and meaning (Gillies et al., 2015). Another problem in operationalizing and measuring meaning is that individuals, bereaved or not, may have a lack of awareness and/or ability to report on these inner processes (Park, 2010). Nonetheless, several researchers and theorists have attempted to define meaning as it relates to grief. Despite there being a multitude of definitions and understandings of meaning, there seems to be three main domains or dimensions of meaning throughout the literature: comprehension, purpose, and significance (Steger, 2012; Martela & Steger, 2016). Comprehension is considered the ability to make sense of one’s life, including in relation to the external world and how one fits within it. Purpose, on the other hand, is more overarching, and considers long-term goals and aspirations (Steger, 2012). Significance focuses on value, worth, and importance (Martela & Steger, 2016). Martela and Steger (2016) consider comprehension as being descriptive, while significance and purpose are evaluative. Therefore, we begin by exploring the comprehension dimension.
Neimeyer (2000) suggests that a loss challenges one’s beliefs and worldviews, which requires the individual to reaffirm or reconstruct meaning in order to cope with the changes. Our assumptive world, or network of cognitive schemas explaining the benevolence and meaningfulness of the world, is often undermined after the loss of a loved one (Gillies & Neimeyer, 2006). For most people, a loss will not shatter the assumptive world beliefs, but instead will be accommodated into the schema. However, for some individuals, the loss may be enough to disrupt these beliefs. Meaning reconstruction has been defined as a process of changing and adapting the self-narrative (Neimeyer & Thompson, 2014). Meaning reconstruction occurs at various levels, including personal, biological, and interpersonal (Neimeyer et al., 2014). This process involves searching for a way to make sense of the loss, to understand why it occurred, to determine what the loss means within our lives, and to decide how the loss will fit into our current narratives (Gillies & Neimeyer, 2006). This may require the individual to relearn or reproduce his self- and worldviews (Neimeyer & Thompson, 2014). Although the operationalization of meaning reconstruction has not been settled, the most common assessment of meaning making has been to ask individuals about their search for meaning (Park, 2010).

Another aspect of meaning reconstruction is the ability to maintain a significant relationship with the deceased that fits into the individual’s new worldviews. The Two Track Model of Bereavement (Rubin, 1999; Rubin & Bar-Nadav, 2015) suggests that equal importance must be placed on the conservation of the relationship and the reorganization of beliefs. Rubin and Bar-Nadav (2015) created the Two-Track Bereavement Questionnaire for Complicated Grief (TTBQ-CG31) to measure and specify
which aspect of the bereavement response would most benefit from intervention. Track I focuses on the biopsychosocial functioning of the individual, while Track II focuses on the relationship to the deceased and the death story. Track II considers and assesses the continuing bond to the deceased and the death story or narrative and how they are affecting the current functioning of the bereaved (Rubin & Bar-Nadav, 2015). The continuing bond may be maintained through memories, rituals, and emotional bonds (Neimeyer & Thompson, 2014). Although the physical relationship with the deceased has ended, there still exists an emotional and psychological relationship that includes memories, emotions, and mental representations associated with the deceased (Rubin, Malkinson, & Witzum, 2017). This model suggests that one must both cope with current life demands while reworking and integrating the bond with the deceased. Thimm & Holland (2016) defined meaning making as the integration and contextualization of the loss. Furthermore, they defined poor integration as the insufficient elaboration and conceptualization of memories and feelings associated with the loss. This poor integration results in a disconnection between the memories about the loss and the individual’s autobiographic knowledge.

Constructivist theory is another model that emphasizes meaning reconstruction as a means of coping with grief. It suggests that we need to impose meaning on life experiences (Neimeyer et al., 2010). In this theory, individuals are motivated to construct and maintain meaningful self-narratives. Specifically, our personal identity and sense of self is established by the stories we create about ourselves and share with others. Constructivism argues that there are core beliefs and assumptions about ourselves, others, and the world, which serve as the backbone for our narratives. The death of a loved one
may challenge these core beliefs and worldviews that were developed before the loss (Neimeyer et al., 2010). Furthermore, after a loss individuals tend to disengage from activities that were once sources of meaning, such as work, hobbies, and other relationships (Lichenthal & Breitbart, 2015). This disconnection further complicates the already difficult process of maintaining meaning and purpose after the loss of a loved one. In one study of bereaved parents, this disconnection and identity disintegration actually worsened over time (Lichenthal & Breitbart, 2015).

In order to resolve the incongruence between our preexisting core beliefs and the loss experience, individuals must manage these beliefs in one of two ways: assimilation or accommodation (Neimeyer et al., 2010). Assimilation involves making sense of the loss in accordance with preexisting beliefs, while accommodation involves reorganizing and expanding beliefs to develop a new self-narrative. Therefore, in order to cope with a loss, individuals must either fit the consequences and reality of the loss into their previous conceptualization and understanding of the world and of themselves, which would essentially maintain their previous held identity and worldview, or they must create new narratives and ways of understanding themselves and the world around them (Douglas, 2014).

According to constructivists, people engage in three activities in order to reconstruct meaning: sense-making, benefit-finding, and identity-change. In order to adapt to a loss, one must continuously attempt to construct a new reality because his/her assumptive worlds have been forever changed (Gillies & Neimeyer, 2006). Sense-making has been defined as the ability to comprehend the loss and find an explanation for the experience. This involves incorporating the loss into our preexisting worldviews.
(Bogensperger & Lueger-Schuster, 2014). It has also been defined as the process of finding a benign explanation for the loss, which is often considered spiritual or philosophical (Meert et al., 2016). It involves attributing a cause to the loss and minimizing the discrepancy between one’s previously held beliefs and the new reality that begins after the loss (Boyraz et al., 2012). The most difficult losses (i.e., violent, untimely, unexpected) often fail to make sense, which can throw our assumptions and meaning into doubt and turmoil. Neimeyer (2000) suggests that individuals must go through the process of questioning and making sense of the bereavement. Sense-making has also been related to life significance, which has been defined as assigning value to an aspect of life that currently exists or is being pursued (Hibberd, 2013). One study found that sense making was the predominant form of meaning making used after the loss of a child (Meert, et al., 2016). It may be that by making sense of a loss, one can begin to regain a sense of connectedness with important goals and values that existed prior to the death of a loved one.

Benefit-finding, on the other hand, involves uncovering positive personal or social consequences of the loss (Holland et al., 2006; Bogensperger & Lueger-Schuster, 2014), This may involve learning about one’s strengths and understanding the significance of various relationships in one’s life (Boyraz et al., 2010). This can be seen as finding the silver lining, or trying to identify positive outcomes related to the loss, such as strengthened relationships with others or new life priorities (Meert et al., 2016). Benefit-finding may take much longer than sense-making, as finding benefits in the loss may take months or even years to determine. These benefits are often found after the maturation of personal and social resources in the months and years following the loss.
(Gillies & Neimeyer, 2006). Benefit finding after a loss was related to lower levels of prolonged grief symptoms in bereaved parents (Lichenthal & Breitbart, 2015). After sense-making and benefit-finding are accomplished, identity-change can be conceptualized as the outcome (Bogensperger & Lueger-Schuster, 2014). After the loss of a loved one and finding meaning, individuals may develop a changed sense of self. This may include feeling more resilient, confident, and independent. Furthermore, this may involve taking on new roles and having a greater appreciation for current relationships (Gillies & Neimeyer, 2006).

Some research has suggested that sense-making is a stronger predictor of differences between survivors of natural and violent losses (Currier, Holland, Coleman, & Neimeyer, 2006). In a study including 1,022 bereaved participants, results indicated that making sense and finding benefit from a loss are both associated with decreases in complications in grief (Holland et al., 2006). Furthermore, sense-making emerged as the stronger predictor of complicated grief at follow-up. Another study found that sense-making was a better predictor of complicated grief than both characteristics about the loss and benefit-finding (Keese, Currier, & Neimeyer, 2008). Another study found that the strongest predictor of difficulty adjusting after a loss was the inability to make sense of the death (Currier, Holland, & Neimeyer, 2008). In relation to the death acceptance domains described earlier, spirituality and religiosity were the most prevalent themes in sense-making for a group of bereaved parents, whereas helping others was the most prevalent theme for benefit-finding (Lichenthal et al., 2010). This suggests that people may use different themes for either sense-making and benefit-finding, which may relate to their effectiveness in buffering against grief.
Park and Folkman (2010) developed another meaning-making model that involves schemas. This model includes both global and situational meaning (Park, 2010). Global meaning has been defined as one’s general orienting systems, which includes goals, beliefs, and subjective feelings. These beliefs are often compared to worldviews or schemas, which interpret and guide how we experience the world (Park, 2010). Global meaning is comprised of one’s fundamental beliefs about the world and their place in the world (Park, 2016). An individual’s global meaning is made up of goals that are often related to relationships, work, achievement, and religion. Similar to Thimm and Holland’s (2016) model, this model suggests that global meaning begins developing early on in life. Situational meaning, on the other hand, refers to meaning in specific contexts. It refers to how global meaning influences a person’s interpretation and reaction to particular situations (Park, 2016). This meaning may begin to develop after stressful situations and involves assigning meaning to an experience, determining incongruences between appraised and global meaning, making meaning, and adjusting to the event (Park, 2010). After initially assigning meaning to an event, the individual must than determine how congruent this meaning is with their pre-established worldviews (Park, 2016). Certain discrepancies between the situational and global meaning may initiate efforts to rebuild their pre-existing meaning systems in a way that accounts for the event. This model suggests that meaning making is both automatic and deliberate, and really focuses on the integration of events (Park, 2010).

According to this model, there are various ways one can make meaning after an event. One way to help with the incongruence between appraised and global meaning is to adjust the appraisal of the event to minimize its effect on their worldviews (Park,
2016). On the other hand, a person can try to change or slightly adjust pre-established worldviews to accommodate for the new experience. The automatic aspect of meaning making can be characterized by intrusive thoughts that help to reduce discrepancies between appraised and global meaning (Park, 2010). Deliberate meaning making refers to efforts made to cope and manage with the stress of a loss. For example, this can include positive-reappraisal, revising goals, and activating spiritual beliefs (Park, 2010). By successfully making meaning using any of these strategies listed above, there is a reduction of discrepancies between appraised and global meaning, and a sense that the world is meaningful and life is worthwhile is restored (Park, 2016). Although similar to other models, this adds on the various types of meaning that can be created by individuals and the processes used to develop or reconstruct meaning.

Thus far, the focus has been on the comprehension domain of meaning, which is often more process-oriented or a reactive formation of meaning. The purpose and significance domains are much more general, and often focuses more on the attainment and proactive formation of meaning, not the process. Viktor Frankl (1985) suggested that perceiving a sense of meaning and life purpose allows us to function optimally. Purpose is considered to be a central aim(s) that organizes life and stimulates goals, behaviors, and meaning (Martela & Steger, 2016). Individuals may have multiple purposes in life that each provide direction and enthusiasm regarding the future. The dimensions of significance and purpose aim to provide value in the present moment, as well as in future pursuits (Martela & Steger, 2016). Although the two seem very similar, the main difference between purpose and significance is that significance focuses on finding value
in life in general, while purpose focuses on finding valuable goals (Martela & Steger, 
2016).

Although there are various ways to operationalize and understand meaning, it 
seems clear that this construct plays a role in grief symptomatology. As previously stated, 
the death of a loved one can really bring into question many of our preexisting 
worldviews. Therefore, there are reasons to believe that one’s ability to make meaning 
after a loss may contribute to the severity or length of grief symptoms. It is important to 
evaluate the relationship between meaning and grief, from both the descriptive 
(comprehension) and evaluative (significance and purpose) sense.

**Meaning and Grief**

One model that focuses on managing grief symptoms while searching for 
meaning is the Dual-Process Model (DPM) developed by Stroebe and Schut (2010). It 
can be understood as a way people come to understand and accept a loss of a loved one 
(Stroebe & Schut, 2010). According to this model, a bereaved individual oscillates 
between two domains: loss-oriented and restoration-oriented (Gillies & Neimeyer, 2006). 
This differs from earlier models that did not distinguish between categories of stressors 
(Stroebe & Schut, 2010). The loss orientation refers to activities that manage the 
separation from the deceased (Gillies & Neimeyer, 2006). In this orientation, the 
individual is focused on appraising and processing the loss or some aspect of the loss 
(Stroebe & Schut, 2010). These activities may include crying, remembering, and 
yearning for the individual. It also involves a painful dwelling, and even search for the 
deceased; this can be a critical part of grieving for some individuals. These activities are 
sometimes referred to as grief work. Restoration oriented activities refer to ones that lead
towards building a new life and identity (Gillies & Neimeyer, 2006). The focus shifts to secondary stressors that are related to bereavement (Stroebe & Schut, 2010). This reflects a struggle for the individual to become reoriented and re-integrated into a changed world without the loved one. The restoration orientation allows individuals to revise their roles and goals in accordance to the impacts of the death (Neimeyer & Thompson, 2014). This orientation requires rethinking and re-planning a future without the deceased, which is at the heart of meaning making (Stroebe & Schut, 2010). The ultimate drive for this oscillation between the domains is the search for meaning. The individuals continue to move back and forth between these activities until a new way of life is constructed (Gillies & Neimeyer, 2006).

Research has suggested that meaning-making has been linked to more favorable grief outcomes. Specifically, it seems that reconstructing meaning after a loss predicts the development of complicated grief. The ability to integrate a loss experience into the bereaved’s meaning system has been associated with reductions in complicated grief for individuals experiencing other forms of trauma and transition (Holland et al., 2010). Finding meaning after a loss has been associated with less intense grief, more positive immune system functioning, and higher subjective well-being (Neimeyer et al., 2010). Sense of meaning and religiousness, along with the appraisal of stressful/traumatic events, are predictive of resilience (Park, 2016). For example, the global belief that the world is controllable and fair, and that one is able to handle a disaster, is adaptive even in highly stressful circumstances (Park, 2016). Furthermore, it seems that meaning making helps to lower mental distress, improve physical health, and increase marital satisfaction for bereaved individuals. In one study, older bereaved spouses who reported making
sense of their loss soon after the death were more prideful, more satisfied, and had higher levels of wellbeing at both an 18 month and 4-year follow-up (Coleman & Neimeyer, 2010). Support has been found for the mediating effects of integration and sense-making in explaining the link between established risk factors and complicated grief (Neimeyer & Thompson, 2014). In another study including earthquake survivors, purpose in life was related to lower levels of PTSD and depressive symptomatology. It was also associated with higher positive emotions (Feder et al., 2013). These results suggest that purpose and meaning in life may have protective factors in the development and maintenance of symptoms (Feder et al., 2013). Another study (Boyraz et al., 2013) found that meaning in life served as a mediator in the relationship between death attitudes and grief symptomatology. These findings suggest that meaning-making serves as a buffer against the negative effects of grief.

Meaning reconstruction also seems to be linked to more favorable outcomes even for those who experience more violent or unexpected losses. One study found that complicated grief developed after a violent loss seems to be explained by the inability to make sense of the loss (Currier et al., 2006). An association between violent deaths and increased prevalence rates of complicated grief have already been established (Boyraz et al., 2015; Lichenthal et al., 2010), but this study was the first of its kind to evaluate the struggle to create meaning after a loss as an explanatory mechanism (Currier et al., 2006). These results further implicate the importance meaning reconstruction plays in the development and alleviation of grief symptomatology.

Although meaning reconstruction may serve as a buffer against complicated grief, it seems that some individuals have difficulty making these changes. One study of parents
who experienced the unexpected loss of a child reported searching for meaning up to 5 years after the loss (Murphy, Johnson, Wu, Fan, & Lohan, 2003). Some of the parents even reported giving up on finding meaning in regards to the death of their child. Furthermore, a majority of parents reported that accommodation did not occur until at least 3 years after the death of their child (Murphy et al., 2003). Similarly, another study found that 47% of bereaved parents were not able to make sense of the loss of a child over an average of 6 years (Keese et al., 2008). Lichenthal et al. (2010) found that bereaved parents reported not being able to make sense of the loss of their child and not being able to find any benefits related to the loss experience. These findings suggest that therapeutic interventions that incorporate meaning making may be necessary in working with individuals suffering from prolonged and complicated grief.

Therapeutic interventions that enhance both sense-making and benefit-finding after a loss have shown significant reductions in prolonged grief symptomatology over time (Lichenthal & Cruess, 2010). One method for enhancing meaning reconstruction is the provision of social support. Emotional support and acceptance may be critical to assisting individuals in the search for meaning (Boyraz et al., 2012). Members of a support system might offer different perspectives on the loss and can listen to the bereaved’s stories. They may offer perspectives that can be integrated into changes in pre-existing schema (Tedeschi & Calhoun, 2004). The ability to engage in open and candid conversations with a supportive other regarding feelings and thoughts surrounding the loss can promote meaning construction and reconstruction (Boyraz et al., 2012). Narratives of the loss are important for posttraumatic growth, and telling these stories to others may be therapeutic (Tedeschi & Calhoun, 2004). Relationships can meet various needs; some needs can be
met by a single relationship while others require a multitude of friendships (Boyraz et al., 2012). One study found that the size of the support network was associated negatively with depression and complicated grief. Furthermore, the more negative relationships one has, the higher the levels of depression, PTSD, and complicated grief (Neimeyer et al., 2010). In another study, social support was associated with improvements in grief symptoms and personal growth following a loss (Hogan & Schmidt, 2002). Moreover, participants indicated that the ability to speak openly and honestly about grief was dependent on the supporting person’s willingness to listen non-judgmentally (Hogan & Schmidt, 2002).

In considering the impact of social support on complicated grief symptomology, it is important to understand the development of social support. Research suggests that personality plays a strong role in the creation and maintenance of relationships (Boyraz et al., 2012). Specifically, neuroticism and extraversion have been found to be associated with social support and positive psychological changes following stressful experiences. According to Tedeschi and Calhoun (2004), extraversion and openness to experience are important qualities that may influence posttraumatic growth. In a study exploring the link between personality traits and meaning making in bereaved individuals, results suggested that both extraversion and neuroticism had indirect effects on meaning making through social support (Boyraz et al., 2012). Extraversion was positively associated with social support, which was positively associated with both sense-making and benefit-finding. This means that social support mediated the relationship between personality traits and meaning making. Furthermore, neuroticism may impact grief intensity by worsening long-term outcomes (Boyraz et al., 2012). This suggests that personality traits may
impact an individual’s response to stressful situations, including the death of a loved one. These personality traits may predict whether an individual finds benefit from a loss (Boyraz et al., 2012).

The research included in this section suggest that meaning-making is related to grief symptoms. However, the relationship may not be as simple as that. There seems to be other factors impacting the relationship between meaning-making and grief. Why are some individuals more likely to be able to make/find meaning after a loss? Why is this meaning-making process easier for some? The next sections will explore other variables related to this relationship.

**Identity, Identity Salience, and Identity Disruption**

It is not difficult to imagine that the loss of a loved one can have a profound effect on one’s sense of self. For example, when a parent loses a child, they lost the ability to enact their parental identity through the relationship with the deceased child (Toller, 2008). Grief can be considered the experience of identity disruption resulting directly from the loss of a loved one; an individual’s ability to pursue meaningful goals, engage in activities consistent with their sense of self, and engage in self-relevant behaviors has been altered (Bonanno et al., 2001). This difficulty of accepting a change to one’s identity and societal roles can lead to long-term consequences. Additionally, research suggests that individuals who maintain continuity in identity after a loss are more resilient (Bonanno et al., 2001). Identity theory posits that one’s self-concept is made up of multiple identities that characterize one’s response to environmental demands (Papa & Lancaster, 2015). These multiple identities are used based on societal roles, group membership, or unique personal characteristics, such as the roles of teachers, colleagues,
parents, etc. Similar to the previous example, a parent who has lost a child now loses certain responsibilities related to the societal role of being a parent, such as taking their child to school (Toller, 2008).

In considering these multiple identities, it seems that there exists a hierarchy of the importance or value for these identities. This is known as identity salience, with identities that are more valued being more salient (Thoits, 2012). Threats to these identities might be associated with identity disruption or issues adjusting, especially if the threatened identities are more salient. Therefore, the loss of a salient role (i.e., parent, sibling) may underlie the phenomenology of loss (Papa & Lancaster, 2015). This is in part due to the beneficial effects these salient roles have on well-being (Thoits, 2012).

Important role-identities are likely more potent sources of meaning, purpose, and guidance in life. In a study conducted by Papa and Lancaster (2015), results indicated that the relationship between the loss of a salient identity role and complicated grief was mediated by identity disruption. Specifically, individuals who experienced a more salient loss had more disrupted identity and, therefore, increased grief severity. Identity disruption can also be understood as identity discontinuity. It is argued that individuals may experience a contrast between their present self and their past self (Rutchick, Slepian, Reyes, Pleskus, & Hershfield, 2018). These contrasts are often a result of major life events, such as divorce, job loss, or the death of a loved one.

In a qualitative study (Toller, 2008), bereaved parents reported experiencing simultaneous and opposing identities of being a parent. Participants struggled with wanting to act out a parent role, but no longer having a child to parent. They reported feeling like both insiders and outsiders to other parents as they can relate on certain
levels, but were no longer actively fulfilling this role (Toller, 2008). This suggests that the death of a loved one can threaten a part of our identity, creating a more disrupted sense of self, and a more prolonged grief reaction.

It seems that changes from pre-loss to post-loss merged identity may be critical in the development of grief symptoms. Specifically, a disrupted identity may be a key aspect of the phenomenology of grief and loss. However, it is important to go beyond the disruption of identity, and consider specifically the bereaved’s identity in relation to the deceased. The following section uses a specific model of prolonged grief to address this gap.

**Cognitive Attachment Model of Prolonged Grief**

Conway and Pleydell-Pearce’s (2000) self-memory model suggests that autobiographical memory plays a crucial role in the development of merged identity and the integration of experiences. In this model, the working-self is considered to be driven by current personal goals and motivations, which creates a basic framework for understanding and conceptualizing our experiences (Maccallum & Bryant, 2010). This model suggests that those experiences which are consistent with aspects of the working-self are more easily integrated (Maccallum & Bryant, 2010). Moreover, the working-self interacts with the long-term, or conceptual, self, which contains information regarding our long-term goals and identity. However, the loss of a loved one may challenge ideas of the conceptual-self, and therefore may be more difficult to understand and integrate from the working-self (Maccallum & Bryant, 2013).

Autobiographical memories can be expressed through narratives about goals, obstacles, and outcomes (Singer & Blagoy, 2004). Moreover, individuals form life-stories throughout their lifespan, which become integrated to create a sense of meaning of
various experiences (McLean & Pratt, 2006). The main thrust of this approach is that individuals use autobiographical reasoning to understand their life experiences. Once we are able to make sense of these narratives, we can use them to understand new experiences (Singer & Blagoy, 2004). Autobiographical memories can be recalled at varying degrees of specificity (Eisma et al., 2015).

The specificity of autobiographical memories can range from general semantic memories, such as the name of one’s favorite sports team, to more specific memories that include more details about the events, time, and place (Conway & Pleydell-Pearce, 2001; Eisma et al, 2015). There seems to be an association between the specificity of an autobiographical memory and one’s ability to cope with the loss of a loved one. One explanation for this is that individuals suffering from depression, PTSD, and complicated grief use over general memory retrieval, meaning they recall autobiographical memories with less specificity (Eisma et al., 2015). In one study by Maccallum and Bryant (2010), participants who met the criteria for complicated grief recalled more loss-related memories than those who did not meet the criteria. Furthermore, these participants also reported having more grief-related goals. The researchers also found that participants with complicated grief reported less specific autobiographical memories. Interestingly, there was a relationship between having grief-related goals and recalling more grief-related memories (Maccallum & Bryant, 2010). Eisma et al. (2015) found that individuals who met the criteria for complicated grief recalled fewer specific memories that were unrelated to the loss. Moreover, these same individuals reported more specific memories that were loss-related. Another study found similar results, with individuals who met the criteria for complicated grief reporting less specific autobiographical memories.
(Robinaugh & McNally, 2013). However, individuals with complicated grief did recall grief-related memories with more specificity. This suggests that although the over general memory retrieval affects a bereaved individual’s ability to recall specific memories, this may not apply to grief-related memories (Eisma et al., 2015).

One model that was created based on previous identity theories, including attachment theory and Conway and Pleydell-Pearce’s model (2001), is the Cognitive Attachment Model created by Maccallum and Bryant (2013). This model attempts to understand bereavement by integrating core factors within the self-memory model (Conway & Pleydell-Pearce, 2000), narrative approaches (Stroebe & Schut, 2010), and attachment theories (Shear & Shair, 2005). According to this model, the integral task during bereavement is the modification and adjustment of identity to incorporate the loss and, therefore, enable the establishment of new goals, life roles, and attachments independent of the deceased (Maccallum & Bryant, 2013). In the Cognitive Attachment Model, the main difference between someone who develops prolonged grief and someone who does not is the degree to which their sense of self is built around the deceased. Specifically, this model suggests that those whose identity is more entwined with the deceased will be at greater risk for the development of prolonged grief (Maccallum & Bryant, 2013).

There are two forms of identity based on the individual’s level of separation from the deceased: merged and independent (Maccallum, & Bryant, 2013). Individuals with a merged identity are those whose identity is constructed around the deceased, while an independent identity is created separately from the deceased. An independent identity does not signify that the deceased was unimportant to the bereaved, but instead suggests that the individual’s goals, motivations, and self-perceptions were not entirely based on
the deceased. These forms of identity are placed upon a continuum ranging from completely merged to entirely independent (Maccallum, & Bryant, 2013). There are several identified factors that may influence where an individual will land on this continuum: the degree to which the relationship with the deceased dominated how the person viewed themselves; the extent to which significant goals, motivations, roles, and future plans were shared with the deceased; and the extent to which the deceased met the emotional or attachment needs of the bereaved. As stated earlier, a person with a merged identity is more at risk for the development of prolonged grief, partly because of the discrepancy between the bereaved’s current goals and the reality created by the loss (Maccallum, & Bryant, 2013). Beyond this, the Cognitive Attachment Model posits that a merged identity will be linked to more retrieval of autobiographical memories involving the loss and the deceased, beliefs and appraisals of the event that generate more distress and encourage the use of maladaptive coping mechanisms, and the use of emotional regulation strategies that perpetuate the distress and reinforce the maladaptive appraisals (Maccallum, & Bryant, 2013).

According to the Cognitive Attachment Model, certain attachment styles seem to be associated with certain cognitive, behavioral, and emotional tendencies and therefore may interact with the merged identity to impact the expression of symptoms. It is expected that individuals with a more anxious attachment style will make vigorous attempts at proximity seeking. Furthermore, these individuals may become more dependent and increase proximity with alternate attachment figures. Maccallum and Bryant (2013) suggest that high anxious attachment may be a risk factor in developing a merged identity. In one study on bereaved spouses, results suggested that those with greater
dependence on the deceased prior to the loss were more likely to develop prolonged grief (Robinaugh, LeBlanc, Vuletich, & McNally, 2014). Furthermore, these individuals had a sense that their meaning in life, future plans, and identity were lost without the deceased. This is consistent with the Cognitive Attachment Model which states that those with a merged identity with the deceased will have more deceased-related memories and more difficulty imagining the future post-loss (Robinaugh et al., 2014).

Although attachment is considered to play a role, the Cognitive Attachment Model focuses specifically on the importance of identity. According to this model, the degree to which one’s identity is merged with the deceased is more integral in the development of prolonged grief than an individual’s preexisting attachment style (Maccallum, & Bryant, 2013). This model goes beyond attachment style because it looks at the specific relationship. This is particularly important in understanding grief as it focuses in on the exact relationship that is being disrupted. This adds another level of specificity to the equation that may not have been considered before.

Although related, merged identity and identity disruption are separate constructs. Merged identity can be seen as a precursor for more severe identity disruption. The two constructs are positively associated, but do not measure the same thing. A disrupted identity may change the way an individual views the world and others. In one study (Tolstikova, Fleming, & Chartier, 2005), results indicated that those who reported less self-awareness and diminished self-confidence had more trauma and grief symptoms. Moreover, 63% of the participants who met the criteria for complicated grief, as assessed by the Inventory of Complicated Grief, reported significantly impaired self-reference.
In regards to the Cognitive Attachment Model, the degree to which one’s identity is merged with the deceased is strongly associated with an individual’s ability to integrate, or make meaning, of a loss, which would impact one’s grief experience (Maccallum, & Bryant, 2013). Specifically, the poor integration of a loss into autobiographical memory has been linked to various maladaptive coping strategies. As mentioned earlier, integration of experiences is based on how much these experiences are aligned with current and long-term goals and motivations. In one study (Maccallum & Bryant, 2010), individuals with complicated grief reported more self-defining memories associated to the deceased, suggesting that their identity was strongly influenced by the deceased.

Merged and independent self-identities will be associated with differential goals involving the deceased. The merged identity is characterized by having more goals and motivations surrounding the deceased. Therefore, the integration of the loss is much more difficult as these goals will need to be heavily modified. In this model, meaning making is defined as the integration of the loss into a revised identity that is not dependent on the deceased. As mentioned earlier, attachment style has been heavily researched in terms of grief symptoms. Previous research on attachment and meaning has neglected the role of identity. There are reasons to believe that the level to which one’s identity is merged with the deceased is important in the development of grief symptoms as this focuses on the specific relationship with the deceased, and not general attachment style. Therefore, the current study aims to address this gap in the literature.

**Purpose and Rationale**

The current study attempts to address several gaps in the literature on the relationship between complicated grief, meaning-making and identity. Since
approximately 10-15% of bereaved individuals develop a more complicated or prolonged grief in which they do not return to pre-loss functioning, further research about the factors that play a role in this relationship is important. Although previous research has provided valuable information about predictors for the development of complicated grief, there still remains questions about how specific factors, particularly meaning making, identity, and purpose, contribute to prolonged grief. The following study seeks to build upon previous research that has focused on meaning-making and merged versus independent identity and the development of complicated grief. Previous research has shown a link between meaning-making and grief and between identity and grief, but little has been done to link all three factors. This study seeks to address this gap by considering all three factors jointly.

This study focuses on the Cognitive Attachment Model of prolonged grief which suggests that a major risk factor for the development of prolonged grief is the degree to which the individual’s identity is merged with that of the deceased. Specifically, this theory posits that an individual with a more merged identity will experience a more prolonged grief reaction. This study is particularly focused on whether a merged identity and lack of meaning integration would be associated with complicated grief. This study seeks to examine complicated grief in a more comprehensive manner by not only considering identity, but also meaning. In addressing these gaps, this study seeks to provide valuable information that clinicians, researchers, and educators can use to improve their work in relation to bereavement.
Research Questions and Hypotheses

Research Question 1: What is the relationship between merged identity and grief symptoms?

Previous research suggests that those who are able to maintain continuity in their identities post-loss are significantly more resilient (Bonanno, Papa, & O’Neill, 2002). Those who experience a more salient loss have shown to have a more disrupted identity and increased grief severity (Papa & Lancaster, 2015). According to the Cognitive Attachment Model, the integral task during bereavement is the modification and adjustment of one’s identity to incorporate the loss and, therefore, enable the establishment of new goals, life roles, and attachments independent of the deceased (Maccallum & Bryant, 2013). An individual with a merged identity is at greater risk for the development of prolonged grief, partly because of the discrepancy between the bereaved’s current goals and the reality created by the loss (Maccallum, & Bryant, 2013). In this study, merged identity was measured by the Inclusion of Other in Self (IOS) scale. The IOS evaluates an individual’s perception of being interconnected with another person (Aron, Aron, & Smollan, 1992). Since this is a one-item measure, the SCI was used as another measure of relationship closeness. The SCI Index evaluates the relative closeness to the deceased in comparison to other relationships. Therefore, the following hypotheses examine the relationship between merged identity, as measured by both the IOS and SCI, and grief.
**Hypothesis 1:** Merged identity will be positively associated with grief symptoms.

**Research Question 2:** What is the relationship between attachment and grief symptoms? The Cognitive Attachment Model suggests that attachment will also be related to grief, specifically in terms of anxious attachment (Maccallum, & Bryant, 2013). The self can be partially conceptualized through close relationships (Papa & Lancaster, 2015). Certain attachment styles seem to be associated with certain cognitive, behavioral, and emotional tendencies and therefore may interact with the merged identity to impact the expression of symptoms. Attachment theory outlines two insecure attachment styles: avoidant and anxious. Those with either form of the insecure attachments are at greater risk for the development of emotional issues. Anxious attachment styles have been linked to poorer outcomes in bereavement. Researched related to avoidant attachment styles have been inconsistent (Maccallum & Bryant, 2013). It was expected that individuals with a more anxious attachment style will make vigorous attempts at proximity seeking, and therefore, become more dependent and increase proximity with alternate attachment figures. However, according to the Cognitive Attachment Model, merged identity is more integral in the development of prolonged grief than an individual’s preexisting attachment style (Maccallum, & Bryant, 2013). Therefore, the following hypotheses examine the relationship between attachment style and grief.

**Hypothesis 2a:** Anxious Attachment will be positively associated with grief symptoms.
**Hypothesis 2b:** Merged identity will predict grief symptoms above and beyond anxious attachment style.

**Research Question 3:** What is the relationship between merged identity and identity disruption/identity continuity in bereaved individuals?

There are differential goals associated with merged versus independent identities in regards to the deceased. An individual with a merged identity will have more goals and motivations that involve and revolve around the deceased (Maccallum & Bryant, 2010). This interconnection of goals and motivation with the deceased make the task of integrating the loss more difficult as these goals will need to be heavily modified. Threats to these goals and motivation are associated with higher identity disruption or issues adjusting, especially if the threatened identities are more salient (Papa & Lancaster, 2015). Specifically, individuals who experience a more salient loss have a more disrupted identity. Identity disruption was assessed by the Identity Disruption scale, which was developed by Habermas and Kober (2015). This four-item scale measures the level to which one’s identity seems consistent with the past, prior to the loss.

Although identity disruption and identity continuity are considered related variables, they are measuring two different constructs. The Self-Continuity Index was developed by Sedikides, Wildschut, Routledge, and Arndt (2015) to measure one’s level the degree to which one’s identity has remained continuous from the past. Identity discontinuity, as measured by this scale, has been defined as a confusion, interruption, and change regarding identity following a stressful event. Therefore, the following hypotheses examine the relationship between merged identity and identity disruption, as measured by
both the Identity Disruption Scale and the Self-Continuity Index. Again, an individual with a merged identity will have an identity that is more intertwined with the deceased, therefore making it more difficult to maintain continuity after the loss (Maccallum & Bryant, 2010). Individuals who experience a more salient loss will have more trouble maintaining a continuous identity. Therefore, the following hypotheses examine the relationship between merged identity and identity disruption/identity continuity.

**Hypothesis 3a**: Merged identity will be positively associated with identity disruption.

**Hypothesis 3b**: Merged identity will be negatively associated with identity continuity.

**Research Question 4**: What is the relationship between merged identity and meaning in bereaved individuals?

According to the Cognitive Attachment Model, merged identity is strongly associated with one’s ability to integrate, or make meaning, of a loss (Maccallum, & Bryant, 2013). Merged and independent self-identities will be associated with differential goals involving the deceased. For an individual with a merged identity, the integration of the loss is much more difficult. In this model, meaning-making is defined as the integration of the loss into a revised identity that is not dependent on the deceased. As previously stated, several definitions and measurements for meaning have been developed. In this study, meaning has been assessed in consideration of the three domains that were previously discussed: comprehension, significance, and purpose. The first hypothesis focuses on meaning as defined by comprehension, while the second focuses on significance and purpose. It is possible that these different understandings and
conceptualizations of meaning may yield different results. This would help in clarifying the relationship between meaning and grief. Therefore, the following hypotheses examine the relationship between merged identity and meaning in bereaved individuals.

**Hypothesis 4a:** Merged identity will be negatively associated with meaning integration, as measured by the Integration of Stressful Life Events Scale.

**Hypothesis 4b:** Merged identity will be negatively associated with meaning in life, as measured by the Meaning in Life Questionnaire.

**Research Question 5:** Is the relationship between merged identity and grief impacted by meaning integration?

It may be difficult to find meaning in life post-loss. Merged identity is strongly associated with an individual’s ability to integrate the situational meaning of a loss into his/her global meaning system (Maccallum, & Bryant, 2013). A disrupted merged identity may change the way an individual views the world and others. It is possible that the death of a loved one may disrupt one’s identity and therefore, impact their ability to integrate the event after a loss. As mentioned previously, an individual with a merged identity may have more difficulty integrating the loss, and therefore, may develop more severe and prolonged grief symptoms. Therefore, the following hypothesis examines whether the relationship between merged identity and grief is mediated by meaning integration.

**Hypothesis 5:** The relationship between merged identity and grief will be mediated by meaning integration, as measured by the Integration of Stressful Life Events Scale.
**Research Question 6:** Is the relationship between merged identity and grief impacted by identity disruption/identity continuity?

As previously mentioned, a disrupted merged identity may change the way an individual views the world and others. There are reasons to believe that the level to which one’s identity is merged with the deceased is important in the development of grief symptoms as this focuses on the specific relationship with the deceased, and not general attachment style. Therefore, the following hypothesis examines whether the relationship between merged identity and grief is mediated by identity disruption/identity continuity.

**Hypothesis 6a:** The relationship between merged identity and grief will be mediated by identity disruption, as measured by the Identity Disruption Scale.

**Hypothesis 6b:** The relationship between merged identity and grief will be mediated by identity continuity, as measured by the Self-Continuity Index.

**Research Question 7:** Is the relationship between merged identity and grief impacted by identity disruption/identity continuity and meaning integration?

As previously mentioned, those whose identity is more merged with the deceased will have more goals and motivations including the deceased. This would mean that one’s identity would be greatly disrupted once the person dies since many of these goals and values will have to be changed. Integrating this loss poses a great challenge as the goals will have to be heavily modified and the bereaved’s worldviews may be greatly affected. There are reasons to believe that the level to which one’s identity is merged with the deceased is important in the development of grief symptoms as this focuses on the specific relationship with the deceased, and not general attachment style. Therefore, this
Hypothesis examines the relationship between merged identity and grief as sequentially mediated by meaning integration and identity disruption/identity continuity.

**Hypothesis 7a:** The relationship between merged identity and grief will be sequentially mediated by meaning integration and identity disruption.

**Hypothesis 7b:** The relationship between merged identity and grief will be sequentially mediated by meaning integration and identity continuity.

### CHAPTER 3

**METHOD**

**Participants**

Participants were recruited for an Internet-based study using Amazon’s Mechanical Turk service (MTurk). Participants were credited $0.75 to their Amazon account upon completion of the 20-minute survey. The inclusion criteria for the study are as follows: (1) complete the Life Events Questionnaire as a screening tool, (2) report the death of a loved one (parent, child, spouse) within the past 3 years, (3) be English proficient, (4) be a US resident, (5) and be 18 years or older. The basis for the second criterion stems from prior research that suggests that significant bereavement phenomena can still be observed 2 years or more post-loss (Prigerson & Jacobs, 2001). Gupta and Bonanno (2011) explain that elevated grief symptoms beyond 3 years may be more indicative of a preexisting depressive condition. This criterion has been used in a number of previous studies regarding bereavement and meaning (Currier et al., 2006; Holland et al., 2006; Neimeyer et al., 2006; Boelen & Eisma, 2015; Gupta & Bonanno, 2011).

Descriptive statistics are displayed in Table 1. A total of 7,512 Amazon Mechanical Turk workers completed the screening questionnaire, of which 442 workers indicated...
losing a spouse, child, or sibling in the past 2 years. 25 participants were excluded for selecting all of the options on the Life Events Questionnaire. 417 Mechanical Turk workers were invited to participate in the full study. 388 Amazon Mechanical Turk workers completed the full survey. Participants who reported a time since loss greater than 36 months were excluded. The final sample consisted of 358 MTurk workers (106 males, 243 females, 1 non-binary/third gender, 8 missing). The majority of participants were Caucasian (67.6%), followed by Black or African American (12.6%), Asian (11.7%), and American Indian or Alaska Native (2.8%). The mean age of the participants was 40.78 (SD=14.55). The majority of participants reported the highest degree earned to be a Bachelor’s (37.7%), followed by some college (22.7%), Master’s (11.9%), high school (11.2%), Associate (10.8%), professional degree (2.5%), and Doctorate (1.7%).

In terms to the relationship to the deceased, most participants reported the loss of a sibling (49.4%), followed by the loss of a child (29.6%) and the loss of a spouse (20.9%). For those who had reported the loss of a sibling, the mean age of the sibling at the time of death was 40.10 (SD=18.63). For those who reported the loss of a child, the mean age of the child at the time of death was 16.20 (SD=16.48). For those who reported the loss of a spouse, the mean years married was 11.75 (SD=11.69). The average time since loss was 12.62 months (SD=8.69).
Table 1

Frequency, Percentage, Mean and Standard Deviation of Sample Demographics

<table>
<thead>
<tr>
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<th>Frequency</th>
<th>Percentage (%) of sample</th>
<th>M</th>
<th>SD</th>
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<tr>
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</tr>
<tr>
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<td>2.8</td>
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<tr>
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<td>97.5</td>
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<td>10.3</td>
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<td>40.10 (age)</td>
<td>18.63</td>
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<td>29.6</td>
<td>16.20 (age)</td>
<td>16.48</td>
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<td>8.69</td>
</tr>
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<td><strong>Interventions for Bereaved</strong></td>
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<tr>
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<td>1.4</td>
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<tr>
<td>High School or equivalent</td>
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<tr>
<td>Some College</td>
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<td>1.7</td>
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<tr>
<td>Professional Program</td>
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<td>2.5</td>
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</table>
Procedure

Approval from Pace University’s Institutional Review Board (IRB) was obtained. Participants were recruited online through Amazon’s Mechanical Turk (MTurk). There are several advantages to using MTurk to recruit participants. MTurk allows researchers to recruit participants who belong to hard-to-reach groups, especially in comparison to alternative forms of data collection that may traditionally be used to reach these populations (Smith, Sabat, Martinez, Weaver, & Xu, 2015). Furthermore, using MTurk may provide solutions to typical threads to validity and generalizability associated with other data collection strategies (Smith et al., 2015). Carr (2014) was able to collect a sample of adult cancer survivors using MTurk. This particular study had high test-retest reliabilities and a 90% completion rate (Carr, 2014). Maccallum and Bonanno (2015) collected a sample of 75 bereaved individuals using MTurk.

Although there are several benefits to using MTurk, there are also some limitations. MTurk offers increased anonymity to its users, which means there is a potential for individuals to lie about their demographic background (Smith et al., 2015). Since participants are being paid, it increases the chance they may lie to be able to participate in a study to receive reimbursement. It is suggested that participants are screened prior to study inclusion and to offer modest payments. It is also possible to ask several demographic and preliminary questions before allowing the participants to be part of the study (Smith et al., 2015).

First, participants completed a screening questionnaire to determine their eligibility for participation in the full study. A total of 7,512 Amazon Mechanical Turk workers completed the screening questionnaire. Bereaved participants who met the inclusion criteria on the LEQ were contacted through MTurk to be invited to participate in the full
study. 442 workers indicated losing a spouse, child, or sibling in the past 2 years. 25 participants were excluded for selecting all of the options on the Life Events Questionnaire. 417 Mechanical Turk workers were invited to participate in the full study. Participants who reported a time since loss greater than 36 months were excluded. The final sample consisted of 358 MTurk workers. To participate, participants clicked on an external link advertised on MTurk. On the first page of the study, participants were informed about: (a) the purpose of the study; (b) the researchers’ credentials and contact information; (c) the estimated time needed to complete the surveys; (d) participant rights, including their voluntary participation and anonymity; (e) instructions on providing their electronic consent to participate in the study. Any participant who had experienced the death of a loved one (spouse, child, sibling) in the past 36 months, is English-proficient, lives in the United States, and is at least 18 years old was considered eligible to participate. Participants provided their consent electronically before being able to access the questionnaire. After providing consent, they were given access to all measures (see Appendices A-J). All participants had up to 30 minutes to complete the questionnaire.

**Demographic Questionnaire.** The demographic questionnaire assessed age, gender, ethnicity, educational level, relationship to the deceased, type of loss (natural vs. violent), time since loss, and interventions taken since loss (i.e., medication, therapy). Research has suggested that there are a multitude of variables that may serve as risk factors in the development of complicated grief. The information gathered in the demographic questionnaire will be used to assess for how these factors relate to the grief symptoms and severity, such as how age or gender relates to grief severity and symptoms and
meaning integration. These factors will also help clarify the other relationships being studied in this project.

**Screening.** The Life Events Questionnaire (LEQ) (Maccallum & Bonanno, 2015) was developed during a study of delayed reward discounting in bereaved individuals to screen for bereavement status without alerting participants to the aims of the study. This study was conducted using MTurk and this questionnaire helped to screen out participants. Participants indicated if they had experienced seven significant life events in the past 2 years (e.g., retirement, marriage, death of a spouse), when it occurred, and whether it caused ongoing distress. Events were presented in random order.

**Complicated Grief.** The Prolonged Grief-13 (PG-13) (Prigerson et al., 2009) is a 13-item self-report measure that assesses for symptoms and severity of prolonged grief. The measure assesses for the loss of a loved one (Criterion A), separation distress (Criterion B), duration (Criteria C), cognitive, emotional, and behavioral symptoms (Criterion D), and impairment (Criterion E). A diagnoses of prolonged grief disorder is indicated if Criterion A has been met for at least 6 months and the individual endorses 5/9 of the Criterion B items daily or to a disabling degree. The individual must also report serious day-to-day impairment (Criterion C). The items are rated on a 5 point Likert scale from 1 (not at all) to 5 (several times a day). The 12-items that assess prolonged grief disorder symptoms exhibit good internal consistency (α=0.82) and incremental validity. The two previous versions of this measure, the Inventory of Complicated Grief and the Inventory of Complicated Grief Revised, have both shown to be highly reliable (α>.90; test-retest reliability coefficient =0.80). The scale has concurrent validity with the Beck Depression Inventory (r=0.67, p<0.001), the Texas Revised Inventory of Grief (r=0.87, p<0.001) and
the Grief Measurement Scale \((r=0.70, p<0.001)\) (Prigerson et al., 1995; Prigerson et al., 2009). The internal consistency for the current study was \(\alpha=0.90\).

**Meaning Integration.** The Integration of Stressful Life Events Screening (ISLES) is a 16-item measure that assesses the extent to which individuals have made meaning of a stressful life event. Holland and others (2010) developed this scale in consideration of Park’s (2010) extensive review of the meaning literature (Lancaster & Carlson, 2014). The ISLES measure the extent to which the appraised meaning of a stressful life event has been integrated into one’s preexisting global meaning. High total scores on the ISLES indicate greater integration of a stressful life experience with global meaning. The ISLES consists of two subscales: Footing in the World and Comprehensibility. The Footing in the World subscale assesses the extent to which an individual possesses purpose in life after a stressful event. It includes items such as “since this event, the world seems like a confusing and scary place” and “my beliefs and values are less clear since the event”. The Comprehensibility subscale assesses if an individual has found ways to understand, or make sense, of a stressful event. It includes items such as “I have made sense of this event” and “I have difficulty integrating this event into my understanding about the world.” The scale has shown to have strong internal reliability \((\alpha= .80 \text{ to } .92)\) (Holland et al., 2010). It has moderate test-retest reliability over 2-3 months \((r=.48 \text{ to } .59)\). This measure is shown to have divergent validity with its negative association with complicated grief (Holland et al., 2010), PTSD and depression (Lancaster & Carlson, 2015). It has also shown discriminant validity against the construct of posttraumatic growth (Lancaster & Carlson, 2015). The internal consistency for the current study was \(\alpha=0.92\).
Meaning in Life. The Meaning in Life Questionnaire (MLQ) is designed to assess both presence of meaning and the search for meaning (Steger, Frazier, Oishi, & Kaler, 2006). These scales align with the dimensions of purpose and significance. There are a total of 10 items in which respondents answer on a 7-point Likert-type scale ranging from 1 (Absolutely True) to 7 (Absolutely Untrue). Some items include, “I am always looking to find my life’s purpose” and “I have discovered a satisfying life purpose.” The MLQ has strong psychometric properties. The presence subscale positively correlates with life satisfaction, extraversion, agreeableness, intrinsic religiosity, and positive emotions, which indicates the measure has convergent validity (Schulenberg, Strack & Buchanan, 2011). The scale demonstrates good internal consistency with coefficient alphas ranging from low .80 to low .90 for both the Presence and Search subscales (Schulenberg et al., 2011). It also has good test-retest reliability for a 1-month period (Schulenberg et al., 2011). For the current study, only the Presence subscale was used. The internal consistency for the current study was $\alpha=0.81$.

Merged Identity. The Inclusion of Other in the Self Scale (IOS) evaluates an individual’s perception of being interconnected with another person (Aron, Aron, & Smollan, 1992). It provides several images of two circles that range from not overlapping at all to almost entirely overlapping. Participants are instructed to choose the figure that best depicts their connectedness with a specific individual. For each pair of circles, one circle refers to the respondent, while the other circle refers to another specified individual. For our purposes, we asked participants to answer questions regarding the deceased. The IOS scale is easy to use and can be administered in less than a minute (Gachter, Starmer & Tufano, 2015). There are both paper and pencil and online versions.
of this assessment. The IOS scale has strong psychometric properties. Since this is a single-item measure, it is not possible to conduct item analyses. In an attempt to establish a kind of reliability check, the authors computed correlations between the original and a 2-week retest \((r=.83)\). The IOS is highly significantly correlated with various measures of relationship closeness: The Liking and Loving Scales, the RCI Scale, and the PAM scale \((Gachter et al., 2015)\). This scale remained reliable and valid when administered through an online platform (MTurk) \((Gachter et al., 2015)\). This measure has also been used with a bereaved sample \((Cadell & Marshall, 2007)\).

**Closeness to Deceased.** The RCI \((Berscheid, Snyder, & Omoto, 1989)\) evaluates relationships, particularly for close relationships such as friendships or romantic partners. For the purpose of this study, we only used the Subjective Closeness Index (SCI) to evaluate the relative closeness to the deceased in comparison to other relationships. The SCI subscale is made up of two questions: "Relative to all your other relationships (both same and opposite sex) how would you characterize your relationship with X?" and "Relative to what you know about other people's close relationships, how would you characterize your relationship with X?" \((Gachter et al., 2015)\). Participants respond to these questions using a 7-point Likert-type scale ranging from 1 (not close at all) to 7 (very close). The SCI score is created by summing the two responses, with higher scores indicating greater closeness. The SCI is highly positively correlated with the IOS scale \((r=.54, p<.01)\) \((Gachter et al., 2015)\). The internal consistency for the current study was \(\alpha=0.94\).

**Attachment.** The Experiences in Close Relationships-Revised (ECR-Revised) \((Fraley, 2005)\) is a 36-item measure that assesses the two insecure attachment style
dimensions: avoidance and anxiety. The subscales are each made of 18-items with higher scores indicating more anxiety or avoidance attachment. Higher scores on the avoidance subscale are indicative of increased withdrawal and discomfort with closeness. Higher scores on the anxiety subscale are indicative of increased levels of fear of rejection, jealousy, and preoccupation with attachment needs. Each item is rated on a 7-point Likert-type scale ranging from 1 (strongly agree) to 7 (strongly disagree). A factor analysis conducted by Sibley and Liu (2002) indicated that the scale was a reliable and replicable self-report measure. The internal reliability for the avoidance and anxiety scales are .92 and .90 respectively (Fraley, 2005). The internal consistencies for the current study were α=0.94 and .96 respectively.

**Identity Disruption.** Identity disruption was assessed using a scale that was developed by Habermas and Kober (2015). This four-item scale measures the level to which one’s identity seems consistent with the past. Items include, “When I think back to how I was four years ago, it feels a little unfamiliar” and “I have the feeling that at the core I am the same person I was four years ago.” Each item is rated on a 6-point Likert-type scale ranging from 1 (not true at all) to 6 (absolutely true). The internal consistency for Habermas and Kober’s (2015) study was good (α=.71). No other psychometric properties were reported. The internal consistency for the current study was α=0.65.

**Identity Continuity.** Identity continuity was measured using the Self-Continuity Index (SCI), which was developed by Sedikides, Wildschut, Routledge, and Arndt (2015) to measure identity discontinuity, which was defined as a confusion, interruption, and change regarding identity following a stressful event. This four-item scale begins each statement with the stem “Thinking about this event makes me feel…”. It contains items
such as “connected with my past” and “important aspects of personality remain the same across time.” The internal consistency of the SCI for the original study was good ($\alpha=0.83$). The internal consistency for the current study was $\alpha=0.82$.

CHAPTER 4

RESULTS

Descriptive Statistics

To better understand the relationships between the primary variables, correlation analyses were conducted for continuous variables and ANOVAs were conducted for categorical variables. The results of the correlations are presented in Table 2 with the corresponding means and standard deviations in Table 3.

In line with previous research, grief was significantly positively correlated with cause of death ($r=.23$, $p<.001$), such that those whose loved ones died of unnatural causes experienced more severe grief symptomology. Moreover, grief was significantly positively correlated with merged identity ($r=.42$, $p<.001$), closeness to the deceased ($r=.29$, $p<.001$), anxious attachment ($r=.13$, $p=.02$), and identity disruption ($r=.43$, $p<.001$). In agreement with previous research, grief and meaning were clearly linked. A strong negative correlation was found between grief and meaning integration, as measured by the ISLES ($r=-.66$, $p<.001$), and a moderate relationship was found between grief and meaning in life, as measured by the MLQ ($r=-.35$, $p<.001$). As expected, meaning integration was strongly positively correlated with meaning in life, as measured ($r=.50$, $p<.001$). Although these are two different measures of meaning, it conceptually
makes sense to have some overlap. Also, there was a clear link between identity disruption in meaning integration.

In line with previous research, meaning integration was found to be strongly negatively correlated with identity disruption (r= -.51, p<.001) and meaning in life was moderately negatively correlated with identity disruption (r= -.34, p<.001). Meaning integration was also moderately negatively correlated with merged identity (r= -.24, p<.001), closeness to the deceased (r= -.17, p=.002), and avoidant attachment (r= -.17, p=.002), and strongly negatively correlated with anxious attachment (r= -.41, p<.001).

Meaning in life was negatively associated with anxious attachment (r= -.40, p<.001) and avoidant attachment (r= -.30, p<.001), and positively associated with both identity continuity (r=.28, p<.001) and age (r=.11, p=.04). As expected, merged identity was strongly positively associated with closeness to the deceased (r=.60, p<.001) and identity disruption (r=.11, p=.04). Surprisingly, merged identity was slightly positively correlated with identity continuity (r=.12, p=.02). Merged identity was negatively associated with anxious attachment (r= -.12, p=.03) and avoidant attachment (r= -.20, p<.001). Closeness to the deceased was significantly positively associated with identity continuity (r=.16, p=.002). Closeness to the deceased was significantly negatively associated with anxious attachment (r= -.17, p=.001) and avoidant attachment (r= -.21, p<.001). These are all important constructs for the Cognitive Attachment Model, which states that the degree to which one’s identity is merged with the deceased and his/her preexisting attachment style tells us something about that individual’s grief. Furthermore, the Cognitive Attachment Model suggests that the integration of the loss event is crucial in grieving.
There are certain risk factors that have been outlined in the potential development of more severe grief symptoms. Surprisingly, grief was not significantly related to time since loss ($r = -.03, p = .57$) and did not significantly differ according to relationship with the deceased $F (2, 350) = .40, p = .67$. The current result may be explained by the time restriction on the time since loss. It is possible that those with an even longer time since loss might have had more severe grief symptoms than the current sample. However, meaning in life was significantly negatively correlated with time since loss ($r = .16, p = .002$). Also, there were significant differences in identity continuity based on the relationship with the deceased, such that those who reported the loss of a spouse ($r = .27, p < .001$) and those who reported the loss of a sibling ($r = .27, p < .001$) exhibited greater continuity than those who reported the loss of a child. This aligns with the literature as those who experience the death of a child often have more difficulty making sense of the loss which would impact their sense of identity continuity.

There were no other differences based on the relationship with the deceased. This is surprising given previous findings on grief and various types of losses (spousal, parental, etc.). Studies have provided evidence that the death of a child has the most profound, enduring effect (Christ, Bonanno, Malkinson, & Rubin, 2003). It has been found that those who experience the death of a child grieve more intensely than those who experience the death of a spouse or parent (Christ et al., 2003). There may be several reasons for the findings. First, evidence has suggested that if a child’s death can be anticipated, there are better bereavement outcomes (Christ et al., 2003). In the current study, those who experienced the death of a spouse were more likely to report the death as occurring from natural causes. This might suggest that the family had anticipated the
loss event. Another reason for this finding might be the average age of death for those who lost a child in the current study. The average age reported at death for the children was 16 with a standard deviation of 16, meaning there was great variability in the ages. It is reasonable that the death of an infant would have different grief outcomes than the death of a young child, adolescent, or adult. Considering the variability, the lack of differences based on relationship might be attributed to this wide range of ages.

Identity disruption was significantly associated with cause of death, such that those who experienced an unnatural loss reported more identity disruption \((r=.25, p<.001)\). Identity disruption scores was significantly negatively associated with age \((r=-.16, p=.003)\), such that younger participants reported more disruption. As expected, grief was significantly correlated with gender \((r=.12, p=.02)\), such that women had more severe grief symptoms. This aligns with previous literature where women consistently reported having more severe grief symptoms than males.

Closeness to the deceased showed small, but significantly correlations with a number of demographic variables. Those who reported the death of a loved one as being unnatural were likely to be closer to the deceased \((r=.18, p=.001)\). Closeness to the deceased was also positively significantly correlated with age \((r=.16, p=.003)\). There was also a small, yet significant correlation with gender \((r=.16, p=.003)\). Merged identity was significantly positively correlated with gender \((r=.13, p=.02)\), with females having a more merged identity. Merged identity was not significantly associated with any other demographic variables. Both meaning integration and meaning in life were significantly positively related to age \((r=.15, p=.005; r=.11, p=.04)\), such that older individuals
reported more integration and meaning in life. Identity continuity was also significantly positively associated with age \(r=.11, p=.04\).
Table 2

Correlation Table for Demographic and Main Study Variables

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
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</tr>
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<td>.05</td>
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<td>-.16**</td>
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<td>-.51**</td>
<td>-.34**</td>
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<td>-.01</td>
<td>.37**</td>
<td>.31**</td>
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<td>16. Identity Continuity</td>
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<td>.11*</td>
<td>.01</td>
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<td>.12*</td>
<td>.16**</td>
<td>-.04</td>
<td>-.22**</td>
<td>-.29**</td>
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Note. Child vs. Spouse (0=Child, 1=Spouse). Child vs. Sibling (0=Child, 1=Sibling). Spouse vs. Sibling (0=Spouse, 1=Sibling). Cause of Death (1=Natural, 2=Unnatural). Gender (1=Male, 2=Female).

(N = 358). *p < .05. **p < .01. ***p < .001.
Table 3.

*Means and Standard Deviations for Correlation Table 2*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
<th>$n$</th>
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<td>1. Time Since Loss (months)</td>
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<tr>
<td>2. Age</td>
<td>40.78</td>
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<td>3. Grief</td>
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<td>5. Meaning in Life</td>
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<td>6. Merged Identity</td>
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<td>357</td>
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<td>7. Closeness to Deceased</td>
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<td>8. Anxious Attachment</td>
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<td>340</td>
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<tr>
<td>11. Identity Continuity</td>
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<td>.87</td>
<td>352</td>
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Research Question 1.

The first research question explored the relationship between merged identity and grief symptoms. Previous research suggests that merged identity plays a role in the development of grief symptoms. Two measures were used to test this relationship, the IOS and SCI.

**Hypothesis 1:** The hypothesis for research question 1a included expected patterns of relationship merged identity and grief. It was predicted that the more merged the identity was with the deceased, the more severe the grief symptoms. Thus, a multiple regression analysis was conducted for merged identity and grief symptoms controlling for the demographic variables of age and gender. In the hierarchical regression analysis, predictor variables to explain grief were entered in two steps. In step 1, demographic variables were entered into the model. In step 2, merged identity was added.

As shown in Table 4, the results in the first step indicated that the model was statistically significant, $F(2, 340) = 3.59, p=.03$. This model explained 2.9% of the variance in grief. With the addition of merged identity in the second step, the model accounted for an additional 17.1% of the variance $F(3, 339) =26.79, p<.001$. In the full model, the only significant predictor of grief was merged identity ($\beta = .42$), thus supporting hypothesis. Those whose identity was more merged with the deceased reported more severe grief symptoms.
Table 4  
*Hierarchical Regression Analysis Summary for Merged Identity Predicting Grief*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>95% CI [LL, UL]</th>
<th>Zero-order r</th>
<th>Partial r</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
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<td>.03</td>
<td>-.08</td>
<td>[-.11, .02]</td>
<td>-.06</td>
<td>.08</td>
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<td>[.53, 4.65]</td>
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<td>-.06</td>
<td>-.11</td>
<td></td>
<td>.171***</td>
</tr>
<tr>
<td>Merged Identity</td>
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<td>[1.71, 2.74]</td>
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</tr>
</tbody>
</table>

Note. Gender (1=Male, 2=Female).  
(N = 323). *p < .05. **p < .01. *** p < .001.

The second regression analysis for hypothesis 1 included closeness to the deceased as a proxy measure of merged identity. A second multiple regression analysis for merged identity, using the SCI, and grief symptoms was conducted. In the hierarchical regression analysis, predictor variables to explain grief were entered in two steps. In step 1, demographic variables were entered into the model. In step 2, closeness to the deceased was added.

As shown in Table 5, the result for the first step in the model was statistically significant, $F(2, 332) = 3.11, p = .04$. This model explained 1.8% of the variance in grief. In support of hypothesis 1, when closeness to the deceased was added in step two, an additional 8.2% of the variance in grief was accounted for ($p < .001$) $F(3, 331) = 12.26, p < .001$. As in the first regression, it was closeness to the deceased ($β = .45$) that remained the single predictor of grief. The closer the relationship was with the deceased, the more severe the grief symptoms.
Table 5
Hierarchical Regression Analysis Summary for Closeness to Deceased Predicting Grief

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>95% CI [LL, UL]</th>
<th>Zero-order r</th>
<th>Partial r</th>
<th>R²</th>
<th>ΔR²</th>
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</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.05</td>
<td>.03</td>
<td>-.07</td>
<td>[-.11, .02]</td>
<td>-0.06</td>
<td>-0.07</td>
<td>.018</td>
<td>.018*</td>
</tr>
<tr>
<td>Gender</td>
<td>2.39</td>
<td>1.05</td>
<td>.13*</td>
<td>[.02, .33]</td>
<td>.11</td>
<td>.12</td>
<td>.100</td>
<td>.082***</td>
</tr>
<tr>
<td>Age</td>
<td>-.07</td>
<td>.03</td>
<td>-.11*</td>
<td>[-.13, -.01]</td>
<td>-0.06</td>
<td>-0.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>1.67</td>
<td>1.01</td>
<td>.09</td>
<td>[-.32, 3.66]</td>
<td>.11</td>
<td>.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closeness to Deceased</td>
<td>.85</td>
<td>.16</td>
<td>.29***</td>
<td>[.55, 1.16]</td>
<td>.28</td>
<td>.29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Gender (1=Male, 2=Female).
(N = 317). *p < .05. **p < .01. ***p < .001.

Research Question 2.

The second research question examined the relationship between attachment and grief symptoms. Previous research suggests that anxious attachment plays a role in the development of grief symptoms.

Hypothesis 2a: The hypothesis for research question 2 included expected patterns of relationship among anxious attachment and grief. It was hypothesized that more anxious attachment predicts more severe grief symptoms. Thus, a multiple regression analysis for anxious attachment and grief symptoms, controlling for the demographic variables of cause of death, medication, therapy, and gender was conducted. In the hierarchical regression analysis, predictor variables to explain grief were entered in two steps. In step 1, demographic variables were entered into the model. In step 2, anxious attachment was added.

As shown in Table 6, the result for the first step in the model was statistically significant, F (2, 326) = 3.80, p=.02). This model explained 2.3% of the variance in grief. In support of hypothesis 2a, when anxious attachment was added in step two, an additional 1.6% of the variance in grief was accounted for (p=.02) F (3, 325) = 4.33, p=.01. Anxious attachment was a significant predictor of grief.
Table 6
Hierarchical Regression Analysis Summary for Anxious Attachment Predicting Grief

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>95% CI</th>
<th>Zero-order r</th>
<th>Partial r</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero-order r</td>
<td>.023</td>
<td>.023*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.05</td>
<td>.03</td>
<td>-.08</td>
<td>[-.12, .02]</td>
<td>-.06</td>
<td>.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>2.76</td>
<td>1.08</td>
<td>.14*</td>
<td>[.63, 4.88]</td>
<td>.13</td>
<td>.13</td>
<td>.038</td>
<td>.016*</td>
</tr>
<tr>
<td>Age</td>
<td>-.03</td>
<td>.04</td>
<td>-.04</td>
<td>[-.10, .04]</td>
<td>-.06</td>
<td>.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>2.68</td>
<td>1.07</td>
<td>.14*</td>
<td>[.57, 4.80]</td>
<td>.13</td>
<td>.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxious Attachment</td>
<td>.81</td>
<td>.35</td>
<td>.13*</td>
<td>[.12, 1.51]</td>
<td>.14</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Gender (1=Male, 2=Female).
(N = 310). *p < .05. **p < .01. ***p < .001.

**Hypothesis 2b**: It was hypothesized that merged identity would predict grief symptoms above and beyond anxious attachment style. Thus, a multiple regression analysis for merged identity, attachment style and grief, controlling for the demographic variables of age and gender was conducted. In step 1, demographic variables were entered into the model. In step two, anxious attachment was added. Finally, in step 3, merged identity was added.

As shown in Table 7, the results indicated that the initial model was statistically significant, $F$ (2, 326) = 3.80, $p=.02$. This model explained 2.3% of the variance in grief. When anxious attachment was added in the second step, an additional 1.6% of the variance in grief was accounted for ($p=.02$) $F$ (3, 325) = 4.33, $p<.001$. In support of hypothesis 2b, when merged identity was added in step three, an additional 19.9% of the variance in grief was accounted for ($\Delta R^2 = .199$, $p<.001$) $F$ (4, 324) = 25.28, $p<.001$. Consistent with the literature, although anxious attachment remained a significant predictor of grief, merged identity was the best predictor of grief ($\beta = .45$). Thus the hypothesis was supported.
### Table 7
Hierarchical Regression Analysis for Merged Identity and Attachment Predicting Grief

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>95% CI [LL, UL]</th>
<th>Zero-order r</th>
<th>Partial r</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.05</td>
<td>.03</td>
<td>-.08</td>
<td>[-.12, .02]</td>
<td>-.06</td>
<td>-.08</td>
<td>.023</td>
<td>.023*</td>
</tr>
<tr>
<td>Gender</td>
<td>2.76</td>
<td>1.08</td>
<td>.14*</td>
<td>[.63, .488]</td>
<td>.13</td>
<td>.14</td>
<td>.038</td>
<td>.016*</td>
</tr>
<tr>
<td>Age</td>
<td>-.03</td>
<td>.04</td>
<td>-.04</td>
<td>[-.10, .04]</td>
<td>-.06</td>
<td>-.04</td>
<td>.038</td>
<td>.016*</td>
</tr>
<tr>
<td>Gender</td>
<td>2.68</td>
<td>1.07</td>
<td>.14*</td>
<td>[.57, 4.80]</td>
<td>.13</td>
<td>.14</td>
<td>.038</td>
<td>.016*</td>
</tr>
<tr>
<td>Anxious Attachment</td>
<td>.81</td>
<td>.35</td>
<td>.13*</td>
<td>[.12, 1.51]</td>
<td>.14</td>
<td>.14</td>
<td>.038</td>
<td>.016*</td>
</tr>
<tr>
<td>Age</td>
<td>-.03</td>
<td>.03</td>
<td>-.06</td>
<td>[-.10, .03]</td>
<td>-.06</td>
<td>-.06</td>
<td>.238</td>
<td>.199***</td>
</tr>
<tr>
<td>Gender</td>
<td>1.47</td>
<td>.97</td>
<td>.08</td>
<td>[-.43, 3.37]</td>
<td>.13</td>
<td>.08</td>
<td>.238</td>
<td>.199***</td>
</tr>
<tr>
<td>Anxious Attachment</td>
<td>1.13</td>
<td>.32</td>
<td>.18***</td>
<td>[.50, 1.75]</td>
<td>.14</td>
<td>.19</td>
<td>.238</td>
<td>.199***</td>
</tr>
<tr>
<td>Merged Identity</td>
<td>2.43</td>
<td>.26</td>
<td>.45***</td>
<td>[1.91, 2.95]</td>
<td>.44</td>
<td>.46</td>
<td>.238</td>
<td>.199***</td>
</tr>
</tbody>
</table>

*Note. Gender (1=Male, 2=Female).
(N = 310). *p < .05. **p < .01. ***p < .001.

**Research Question 3.** The third research question explored the relationship between merged identity and identity disruption/identity continuity. Two dependent variables were used, one specially designed to measure identity disruption, the other to measure continuity.

**Hypothesis 3a:** It was hypothesized that more merged identity would predict more identity disruption. Thus, a multiple regression analysis for merged identity and identity disruption, controlling for the demographic variables of age and gender was conducted. In the hierarchical regression analysis, predictor variables to explain identity disruption were entered in two steps. In step 1, demographic variables were entered into the model. In step 2, merged identity was added.

As shown in table 8, the results indicated that the initial model was statistically significant, $F (2, 332) = 4.94, p=.01$. This model explained 2.7% of the variance in identity disruption. As hypothesized, when merged identity was added in step two, an additional 1.3% of the variance in identity disruption was accounted for ($p=.03$) $F (3,$
331) = 4.89, p=.003. Although this was a small effect, the results still supported hypothesis 3a; merged identity did significantly predict identity disruption, such that those who reported having a more merged identity also reported more identity disruption.

### Table 8

**Hierarchical Regression Analysis Summary for Merged Identity Predicting Identity Disruption**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>95% CI [LL, UL]</th>
<th>Zero-order r</th>
<th>Partial r</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.01</td>
<td>.00</td>
<td>-.16*</td>
<td>[-.02, .00]</td>
<td>-.15</td>
<td>-.16</td>
<td>.027</td>
<td>.027*</td>
</tr>
<tr>
<td>Gender</td>
<td>.16</td>
<td>.12</td>
<td>.07</td>
<td>[-.08, .40]</td>
<td>.05</td>
<td>.07</td>
<td>.041</td>
<td>.013*</td>
</tr>
<tr>
<td>Age</td>
<td>-.01</td>
<td>.00</td>
<td>-.17*</td>
<td>[-.02, .00]</td>
<td>-.15</td>
<td>-.17</td>
<td>.041</td>
<td>.013*</td>
</tr>
<tr>
<td>Gender</td>
<td>.13</td>
<td>.12</td>
<td>.06</td>
<td>[-.12, .37]</td>
<td>.05</td>
<td>.06</td>
<td>.041</td>
<td>.013*</td>
</tr>
<tr>
<td>Merged Identity</td>
<td>.07</td>
<td>.03</td>
<td>.12*</td>
<td>[0.01, .14]</td>
<td>.11</td>
<td>.12</td>
<td>.041</td>
<td>.013*</td>
</tr>
</tbody>
</table>

*Note. Gender (1=Male, 2=Female). (N = 319). *p < .05. **p < .01. ***p < .001.*

**Hypothesis 3b:** A multiple regression analysis for merged identity and identity continuity, controlling for the demographic variables of age and gender, was conducted. In the hierarchical regression analysis, predictor variables to explain identity continuity were entered in two steps. In step 1, demographic variables were entered into the model. In step 2, merged identity was added.

As shown in table 9, the results indicated that the initial model was not statistically significant, F (2, 344) = 1.56, p=.13. When merged identity was added in step two, the model was statistically significant, accounting for a total of 2.6% of the variance in identity continuity F (3, 343) = 2.27, p=.03. Although significant, the relationship was positive, thus opposite of the hypothesized relationship. Those who reported having a more merged identity, reported having more identity continuity. Thus, the hypothesis was not supported.
Table 9
Hierarchical Regression Analysis for Merged Identity Predicting Identity Continuity

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>95% CI [LL, UL]</th>
<th>Zero-order r</th>
<th>Partial r</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.01</td>
<td>.00</td>
<td>.11*</td>
<td>[.00, .01]</td>
<td>.19</td>
<td>.22</td>
<td>.012</td>
<td>.012</td>
</tr>
<tr>
<td>Gender</td>
<td>-.01</td>
<td>.10</td>
<td>-.01</td>
<td>[-.21, .19]</td>
<td>.11</td>
<td>.14</td>
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<td></td>
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<tr>
<td>Age</td>
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<td>.00</td>
<td>.10</td>
<td>[.00, .01]</td>
<td>.19</td>
<td>.21</td>
<td>.026</td>
<td>.014**</td>
</tr>
<tr>
<td>Gender</td>
<td>-.04</td>
<td>.10</td>
<td>-.02</td>
<td>[-.24, .17]</td>
<td>.11</td>
<td>.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merged Identity</td>
<td>.06</td>
<td>.03</td>
<td>.12*</td>
<td>[.01, .12]</td>
<td>.12</td>
<td>.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Gender (1=Male, 2=Female).
(N=351). *p < .05. **p < .01. ***p < .001.

Research Question 4. The fourth research question explored the relationship between merged identity and meaning in bereaved individuals.

Hypothesis 4a: It was hypothesized that a merged identity would predict less meaning integration. Thus, a multiple regression analysis for merged identity, as and meaning integration, controlling for the demographic variables of age and gender was conducted. In the hierarchical regression analysis, predictor variables to explain meaning integration were entered in two steps. In step 1, demographic variables were entered into the model. In step 2, merged identity was added.

As shown in table 10, the results indicated that the initial model was statistically significant, $F(2, 339) = 4.24, p=.02$. This model explained 2.4% of the variance in meaning integration. When merged identity was added to the model, an additional 6.5% of the variance in meaning integration was accounted for ($p<.001$). Thus, the hypothesis was supported. Furthermore, merged identity was the strongest predictor of meaning integration.
Table 10
Hierarchical Regression Analysis Summary for Merged Identity Predicting Meaning Integration

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>95% CI</th>
<th>Zero-order r</th>
<th>Partial r</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.13</td>
<td>.05</td>
<td>.15**</td>
<td>[.04, .22]</td>
<td>.14</td>
<td>.15</td>
<td>.024</td>
<td>.024*</td>
</tr>
<tr>
<td>Gender</td>
<td>-2.10</td>
<td>1.48</td>
<td>-.08</td>
<td>[-5.02, .82]</td>
<td>-.05</td>
<td>-.08</td>
<td>.090</td>
<td>.065***</td>
</tr>
<tr>
<td>Age</td>
<td>.14</td>
<td>.05</td>
<td>.16**</td>
<td>[.05, .23]</td>
<td>.14</td>
<td>.16</td>
<td>.090</td>
<td>.065***</td>
</tr>
<tr>
<td>Gender</td>
<td>-1.26</td>
<td>1.44</td>
<td>-.05</td>
<td>[-4.10, 1.58]</td>
<td>-.05</td>
<td>-.05</td>
<td>.090</td>
<td>.065***</td>
</tr>
<tr>
<td>Merged Identity</td>
<td>-1.96</td>
<td>.40</td>
<td>-.26***</td>
<td>[-2.74, -1.18]</td>
<td>-.26</td>
<td>-.26</td>
<td>.090</td>
<td>.065***</td>
</tr>
</tbody>
</table>

Note. Gender (1=Male, 2=Female). (N = 346). *p < .05. **p < .01. ***p < .001.

Hypothesis 4b: It is hypothesized that a merged identity predicts less meaning in life. Thus, a multiple regression analysis for merged identity and meaning in life, controlling for the demographic variables of age and gender, was conducted. In the hierarchical regression analysis, predictor variables to explain meaning in life were entered in two steps. In step 1, demographic variables were entered into the model. In step 2, merged identity was added.

In step 1, the results indicated that the model was not statistically significant, $F(2, 345) = 1.95, p=.14$. When merged identity was added to the model, the model was not significant $F(3, 344) =1.75, p=.16$. Thus, Hypothesis 4b was not supported.

Table 11
Hierarchical Regression Analysis Summary for Merged Identity Predicting Meaning in Life

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>95% CI</th>
<th>Zero-order r</th>
<th>Partial r</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.05</td>
<td>.03</td>
<td>.11**</td>
<td>[.00, .11]</td>
<td>-.16</td>
<td>-.17</td>
<td>.011</td>
<td>.011</td>
</tr>
<tr>
<td>Gender</td>
<td>-.29</td>
<td>.86</td>
<td>-.02</td>
<td>[-1.98, 1.41]</td>
<td>.11</td>
<td>.12</td>
<td>.015</td>
<td>.004</td>
</tr>
<tr>
<td>Age</td>
<td>.05</td>
<td>.03</td>
<td>.11**</td>
<td>[.00, .11]</td>
<td>-.16</td>
<td>-.17</td>
<td>.015</td>
<td>.004</td>
</tr>
<tr>
<td>Gender</td>
<td>-.41</td>
<td>.87</td>
<td>-.03</td>
<td>[-2.11, 1.30]</td>
<td>.11</td>
<td>.12</td>
<td>.015</td>
<td>.004</td>
</tr>
<tr>
<td>Merged Identity</td>
<td>.28</td>
<td>.24</td>
<td>.06</td>
<td>[-.19, .74]</td>
<td>.06</td>
<td>.05</td>
<td>.015</td>
<td>.004</td>
</tr>
</tbody>
</table>

Note. Gender (1=Male, 2=Female). (N = 352). *p < .05. **p < .01. ***p < .001.
**Research Question 5.** The fifth research question examined whether the relationship between merged identity and grief is impacted by meaning integration (Figure 1).

**Hypothesis 5:** It is hypothesized that the relationship between merged identity and grief is mediated by meaning integration. To further understand the relationship, a mediational analysis was performed. A regression was conducted using Hayes (2017) PROCESS macro for SPSS in order to assess: 1) whether merged identity predicts meaning integration, 2) whether merged identity predicts grief, and 3) whether merged identity and meaning integration predict grief.

In the first mediational analysis, results indicated that merged identity was a significant predictor of meaning integration, B= -1.86, SE=.40, p<.001 and that meaning integration was a significant predictor of grief, B=- .41, SE=.03 p< .001. These results support the mediational hypothesis. Merged identity remained a significant predictor of grief after controlling for the mediator, meaning integration, B=1.54, SE=.21, p< .001. Approximately 50.5% of the variance in grief was accounted for by the predictors ($R^2 = .51$). The indirect effect was tested using a percentile bootstrap estimation approach with 5000 samples, implemented with the PROCESS macro Version 3 (Hayes, 2017). These results indicated the indirect coefficient was significant, B= .77, SE =.20, 95% CI = .40, 1.17. The proportion of the total effect that was accounted for by the mediator, meaning integration, was .33.
Research Question 6. The sixth research question examined whether the relationship between merged identity and grief is impacted by identity disruption/identity continuity.

Hypothesis 6a: It is hypothesized that the relationship between merged identity and grief is mediated by identity disruption. To further understand the relationship, a mediational analysis was performed using Hayes (2017) PROCESS macro for SPSS in order to assess: 1) whether merged identity predicts identity disruption, 2) whether merged identity predicts grief, and 3) whether merged identity and identity disruption predict grief.

In the mediational analysis (Figure 2), results indicated that merged identity was a significant predictor of identity disruption, B=.07, SE=.04, p=.04 and that identity disruption was a significant predictor of grief, B=3.17, SE=.37 p<.001. These results support the mediational hypothesis. Merged identity remained a significant predictor of
grief after controlling for the mediator, identity disruption, B=2.04, SE=.24, p< .001. Approximately 32.8% of the variance in grief was accounted for by the predictors ($R^2 = .33$). The indirect effect was tested using a percentile bootstrap estimation approach with 5000 samples, implemented with the PROCESS macro Version 3 (Hayes, 2017). These results indicated the indirect coefficient was significant, B= .23, SE =.12, 95% CI = .00, .45. The proportion of the total effect that was accounted for by the mediator, identity disruption, was .10.

**Figure 2.** Mediation model for the relationship between merged identity and grief as mediated by identity disruption.

![Mediation Model Diagram]

- Direct effect, $b = 2.04$, $p<.001$
- Indirect effect, $b = .23$, 95% CI [.00, .45]

**Hypothesis 6b:** It is hypothesized that the relationship between merged identity and grief is mediated by identity continuity. To further understand the relationship, a mediational analysis was performed using Hayes (2017) PROCESS macro for SPSS in order to assess: 1) whether merged identity predicts identity continuity, 2) whether merged identity predicts grief, and 3) whether merged identity and identity continuity predict grief.
In the mediational analysis (Figure 3), results indicated that merged identity was a significant predictor of identity continuity, $B=.06$, $SE=.03$, $p=.02$ and that identity continuity was a significant predictor of grief, $B=-1.17$, $SE=.50$ $p=.02$. However, this result contradicts the results of the first identity disruption measure and the prediction for hypothesis 6. These results indicate that merged identity positively predicted identity continuity. The reasons for this will be further explored in the discussion section. Merged identity remained a significant predictor of grief after controlling for the mediator, identity continuity, $B=2.31$, $SE=.26$, $p<.001$. Approximately 18.7% of the variance in grief was accounted for by the predictors ($R^2=.19$). The indirect effect was tested using a percentile bootstrap estimation approach with 5000 samples, implemented with the PROCESS macro Version 3 (Hayes, 2017). These results indicated the indirect coefficient was significant, $B=-.08$, $SE=.05$, 95% CI = -.18, .00. The proportion of the total effect that was accounted for by the mediator, identity continuity was .03.

*Figure 3.* Mediation model for the relationship between merged identity and grief as mediated by identity continuity.

\[ b = .06, \ p = .02 \]
\[ b = -1.17, \ p = .02 \]

Direct effect, $b = 2.31$, $p<.001$
Indirect effect, $b = -.08$, 95% CI [-.18, .00]

$N=347$
**Research Question 7:** The seventh research question examined whether the relationship between merged identity and grief is impacted by meaning integration and identity disruption/identity continuity. Two sequential mediation analyses were run (Figure 4 and Figure 5).

**Hypothesis 7a:** It is hypothesized that the relationship between merged identity and grief symptoms will be sequentially mediated by meaning integration and identity disruption. To analyze whether the effect of merged identity (independent variable) on grief (dependent variable) could be explained through meaning integration (mediator one) and identity disruption (mediator two) the SPSS PROCESS macro model 6 (Hayes, 2013) was used.

The analyses revealed a significant influence of merged identity on grief, $B = 2.30$, $SE = .27$, $p< .001$, and meaning integration, $B = -2.04$, $SE = .41$, $p<.001$. Subsequent analyses of meaning integration on identity disruption, $B = -.04$, $SE = .00$, $p<.001$, as well as of identity disruption on grief, $B = .88$, $SE = .36$, $p = .02$, were significant, indicating influence of meaning integration on identity disruption, as well as of identity disruption on grief.

When finally examining the influence of merged identity, meaning integration, and identity disruption on grief concurrently, the effect of merged identity was considerably reduced, $B = 1.43$, $SE = .21$, $p<.001$. The indirect effect of merged identity on grief through meaning integration and identity disruption was strongly significant as indicated by the 95% CI (.02, .16) using 5,000 bootstrap estimations. Thus, the sequential mediational hypothesis was supported (See Figure 4).
Figure 4. Sequential mediation model for the relationship between merged identity and grief symptoms as mediated by meaning integration and identity disruption.

\[ d_{31} = -.04^{***}, \text{SE} = .00 \]

\[ a_1 = -2.04^{***}, \text{SE} = .41 \]
\[ a_2 = -.01, \text{SE} = .03 \]
\[ b_1 = 1.88^{**}, \text{SE} = .36 \]
\[ b_2 = -.39^{***}, \text{SE} = .36 \]

Total effect: \[ c = 2.30^{***}, \text{SE} = .27 \]
Direct effect: \[ c' = 1.43^{***}, \text{SE} = .21 \]

**Hypothesis 7b:** It is hypothesized that the relationship between merged identity and grief symptoms will be mediated by identity continuity and meaning integration. To analyze whether the effect of merged identity (independent variable) on grief (dependent variable) could be explained through meaning integration (mediator one) and identity continuity (mediator two) the SPSS PROCESS macro model 6 (Hayes, 2013) was used.

The analyses revealed a significant influence of merged identity on grief, \[ B = 2.26, \text{SE} = .27, p < .001, \] and meaning integration, \[ B = -1.92, \text{SE} = .40 p < .001. \] Subsequent analyses of meaning integration on identity continuity, \[ B = -.01, \text{SE} = .00, p = .07, \] as well as of identity continuity on grief, \[ B = -.57, \text{SE} = .39, p = .14, \] were not significant.
When finally examining the influence of merged identity, meaning integration, and identity continuity on grief concurrently, the effect of merged identity was reduced, $B=1.48$, SE=.21, $p<.001$. The indirect effect of merged identity on grief through meaning integration and identity continuity was significant as indicated by the 95% CI (.00, .02) using 5,000 bootstrap estimations. However, the direction of the relationship was opposite of the prediction. Merged identity negatively predicted meaning integration, which negatively predicted continuity, which negatively predicted grief. Interestingly, the initial total effect was positive, while the indirect effect was negative. Thus, the sequential mediational hypothesis was not supported (See Figure 5).

*Figure 5.* Sequential mediation model for the relationship between merged identity and grief symptoms as mediated by meaning integration and identity continuity.

\[
d_{31} = -0.01, \text{SE} = 0.00
\]

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<td><strong>Meaning Integration</strong></td>
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Total effect: $c=2.26***$, SE=.27
Direct effect: $c'=1.48***$, SE=.21
CHAPTER 5

DISCUSSION

Summary of Results

Death and grief are unavoidable aspects of life, and thus, it is important to understand what might predict the development of more severe or prolonged grief symptoms. Findings from the current study strengthen knowledge of the mechanisms by which merged identity is related to grief, specifically, by highlighting the roles of meaning integration and identity disruption. Results suggest that links between merged identity and grief operate through a lack of integration of the loss, which in turn is associated with greater disruption in identity. Previous literature has provided information on the relationship between one’s ability to make meaning after a loss and grief symptoms (Gillies, Neimeyer, & Milman, 2015). Furthermore, research has linked the bereaved’s identity and identity disruption after a loss to grief symptoms, however, most research has failed to consider the variable of meaning, identity, identity disruption, and grief concurrently. The current study attempts to address several gaps in the literature on the relationship between complicated grief, meaning integration, and identity.

The first aim of the study was to explore whether merged identity predicted grief symptoms. The main measure of merged identity used in the current study was the Inclusion of Other in the Self (IOS). A proxy measure, the Subjective Closeness Inventory (SCI), was used to assess the closeness to the deceased. Regarding hypothesis 1, results showed significant direct associations between merged identity and grief. In accordance with the hypothesis, for both measures, the more merged an individual’s identity or the closer the relationship was with the deceased, the more severe their grief
symptoms. Most importantly, merged identity and closeness to the deceased each
remained the strongest predictors of grief among the demographic variables.

The second aim of the study was to explore the relationship between attachment
style, specifically anxious attachment, and grief. First, the results indicated that anxious
attachment was a significant predictor of grief. Next, it was hypothesized that merged
identity would be a better predictor of grief than anxious attachment. This hypothesis was
supported. Again, merged identity was the best predictor of grief in the model, above and
beyond anxious attachment.

The third aim of the study was to explore whether merged identity predicted
identity disruption/identity continuity. The results indicated that merged identity was a
significant predictor of identity disruption, such that those who reported having a more
merged identity had more identity disruption. Surprisingly, results indicated that merged
identity was a significant predictor of identity continuity, but in the opposite direction as
predicted. Those with a more merged identity reported more identity continuity, which is
inconsistent with the literature.

The fourth aim of the study was to explore whether merged identity predicted
meaning. There were two measures of meaning used in this study, the Integration of
Stressful Life Events Scale (ISLES) to measure meaning integration and the Meaning in
Life Questionnaire (MLQ) to measure meaning in life. In accordance with the hypothesis,
results indicated that merged identity was a significant predictor of meaning integration.
However, merged identity did not significantly predict meaning in life.

The fifth aim of the study was to explore whether the relationship between
merged identity and grief is mediated by meaning integration. The results indicated that
meaning integration partially mediated the relationship between merged identity and grief. Thus, the hypothesis was supported.

The sixth aim of the study was to explore whether the relationship between merged identity and grief is mediated by identity disruption/identity continuity. The results indicated that identity disruption partially mediated the relationship between merged identity and grief. Thus, the first part of the hypothesis was supported. The results including identity continuity were inconsistent with the literature. Those who reported having a more merged identity, reported more continuity, which predicted less severe grief symptoms.

The final aim of the study was to explore whether the relationship between merged identity and grief is sequentially mediated by meaning integration and identity disruption/identity continuity. The results including identity disruption supported the hypothesis regarding sequential mediation. However, the results including identity continuity did not support the hypothesis.

**Merged Identity and Grief**

The set of hypotheses examined the relationship between merged identity and grief. Merged identity was measured by the Inclusion of Other in Self (IOS) and by a proxy measure, the Subjective Closeness Index (SCI), which evaluated the closeness to the deceased. The study found a moderate correlation between merged identity and closeness to the deceased, respectively, and grief ($r = .42, .29$). To examine this relationship further, a hierarchical multiple regression was performed to look at merged identity as a predictor of grief. As hypothesized, when accounting for demographic
variables, both merged identity and closeness to the deceased were the best predictors of grief.

These findings support previous research that suggested there is a link between one’s merged identity and grief symptoms (Papa & Lancaster, 2015; Toller, 2008). According to Maccallum and Bryant’s (2003) Cognitive Attachment Model, the integral task during bereavement is modifying one’s merged identity to incorporate the loss. This requires establishing a new, or at least adjusted, sense of self. It is suggested that those who are unable to build a new sense of self after a loss are more likely to develop severe and prolonged grief symptoms (Papa & Lancaster, 2015; Maccallum & Bryant, 2003). Merged identity can be understood as a continuum between a merged and independent identity. Someone with a merged identity will be more likely to have an identity that is constructed around another person. If someone with a merged identity experiences the loss of the person with whom their identity is merged, he or she is more likely to have trouble maintaining a sense of self after the loss (Maccallum & Bryant, 2013). As stated earlier, a person with a merged identity is more at risk for the development of prolonged grief, partly because of the discrepancy between the bereaved’s current goals and the reality created by the loss (Maccallum, & Bryant, 2013). Role-identities, or salient roles, are likely to be potent sources of meaning, purpose, and guidance in life. It makes sense that those who have lost a spouse, sibling, or child will have a more merged identity with the deceased, and therefore have more difficulty coping with the loss.

**Anxious Attachment and Grief**

The second aim of this study focused on the relationship between attachment style and grief. In accordance with the hypothesis, there was a small, but significant correlation
between anxious attachment and grief (r=.13) and no significant correlation between avoidant attachment and grief. Based on the Cognitive Attachment Model, it was further hypothesized that merged identity would be a better predictor of grief than attachment style, and subsequent analyses supported this prediction. When accounting for demographic variables and attachment style, merged identity was the best predictor of grief.

Attachment style has been clearly implicated in the grief literature. Early childhood attachment patterns may be associated with grief reactions, especially in how the individual configures the meaning of the loss (Gillies & Neimeyer, 2006). Previous research has suggested that an anxious attachment style is related to greater and more persistent grief symptoms (Mancini, Sinan, & Bonanno, 2015; Maccallum & Bryant, 2013). According to the Cognitive Attachment Model, attachment styles seem to be related to certain cognitive, behavioral, and emotional tendencies and, therefore may interact with merged identity to impact the expression of grief symptoms. However, it is also further argued that anxious attachment, not avoidant attachment, is related to more severe grief symptoms (Maccallum & Bryant, 2003; Maccallum & Bryant, 2013). Individuals with a more anxious attachment style are more likely to make vigorous attempts at proximity seeking, and therefore will have more severe grief symptoms (Maccallum & Bryant, 2013). The results supported this hypothesis.

It is important to consider the implications of these findings. Specifically, why is it that merged identity seems more linked to grief symptoms than attachment? The main argument for merged identity predicting grief above and beyond attachment style has to do with the focus of each concept. Attachment styles begin to develop in childhood based
on our earliest relationships (Bowlby, 1980). These early childhood attachments establish a working model for our future relationships in adulthood. Attachment styles influence our interactions with others and are important factors in our emotion regulation. There are features of anxious attachment that have been linked to grief, including relational dependency (Field & Sundin, 2001) and self-doubt in one’s ability to handle stress (Maccallum & Bryant, 2013).

Although attachment does help in the understanding of grief, it lacks in that it does not focus on the specific relationship with the deceased. Merged identity, on the other hand, focuses on the bereaved and his/her relationship with the deceased. It makes sense that attachment style influences whether or not one develops a merged identity, but the concepts are not identical. While attachment looks at one’s general way of interacting with others, merged identity emphasizes how this particular relationship functioned. These findings are particularly noteworthy as it provides evidence for the importance of concentrating on the specific relationship involved. There are certain established risk factors for complicated grief, including attachment style, but these findings suggest that attachment style may not be the best predictor.

Merged Identity, Identity Disruption, and Identity Continuity

The third aim of this study focused on the relationship between merged identity and identity disruption. Identity Disruption was assessed in two ways. The Identity Disruption Scale measures how consistent one’s current identity is with the past. In accordance with the Cognitive Attachment Model, and in support of the hypothesis, merged identity predicted identity disruption. Specifically, individuals with a more merged identity had more identity disruption, which in turn predicted more severe grief
symptomatology. This is an important finding as it supports the argument that by having a more merged identity, individuals will have a harder time maintaining current goals and self-views.

Grief can be conceptualized as the experience of identity disruption following the loss of a loved one. Following a loss, an individual’s pursuit of meaningful goals, engagement in activities consistent with a sense of self, and engagement in self-relevant behaviors can be altered (Bonanno et al., 2001). It is suggested that the loss of more salient individuals leads to more identity disruption. Therefore, the loss of a salient role (i.e., parent, sibling, spouse) may underlie the phenomenology of loss (Papa & Lancaster, 2015). A disrupted merged identity may change the way an individual views the world and others.

In this study, the saliency of the loss was expected to be more tied to identity because eligible participants included only those who had experienced the loss of a spouse, sibling, or child. This requirement was made to narrow down losses that would, conceptually, have a greater impact on identity. Important role-identities are likely more potent sources of meaning, purpose, and guidance in life. Research has suggested that the death of a spouse, sibling, or child result in more severe grief symptoms. The prevalence of complicated grief is about 10-20% for those who lose a spouse and is even higher for parents who lose a child/children, as compared to the loss of a parent, grandparent, or friend (Shear, 2015). The death of a spouse leads to various changes in roles and responsibilities; the widow/widower’s meaning system is impacted and may require major revisions (Field, Gal-Oz, & Bonanno, 2003). The bereaved spouse loses the partnership of marriage in regards to splitting tasks and in terms of companionship. The
death of a spouse alters one’s social role and it can be difficult to establish new friendships and/or maintain former ones. Bereaved parents who experience the loss of a child often report significantly more grief symptoms for extended periods of time as this is often unexpected and feels unnatural (Boyraz et al., 2015; Lichenthal, Currier, Neimeyer, & Keese, 2010). Compared to other losses, the death of a child often comes without warning and violates the perceived order of living (Keese et al., 2008). In general, the loss of a sibling has received less attention. However, the extent to which siblings might provide support, companionship, and a sense of identity, would be associated with more severe grief outcomes. In one study, bereaved siblings reported lower overall health and life satisfaction (Perkins & Harris, 1990). Sibling relationships are comparable to other relationships, except that, in addition, these relationships last much longer; essentially a life time. Siblings’ identities are often intertwined as they share history, and thus, the death of a sibling can feel like losing a part of oneself (Packman, Horsley, Davies, & Kramer, 2006).

In contrast to the results using identity disruption, the mediational analysis including identity continuity yielded surprising results. The Self-Continuity Index is supposed to measure feelings of confusion, interruption, and change in identity after a stressful event. It is surprising that a more merged identity predicted higher levels of continuity. One explanation for this finding may be that the identity continuity measure does not actually measure continuity or identity disruption as defined in this study. Upon further examination of the scale, it seems that the items are more focused on the bereaved’s connection with the past and the deceased. In that case, the positive correlation makes sense; those with a merged identity are likely to be highly connected to
the deceased and the past. Given the items on the scale, a high score may indicate
collection with the deceased, and this may be predictive of lower levels of grief severity.
It is recommended that the research be replicated with another measure of continuity.

**Merged Identity and Meaning**

The next set of hypotheses focused on the relationship between meaning and
identity. In the literature, meaning has been defined and measured in various ways, thus
analyses were run using both meaning integration and meaning in life. The results of the
first analysis including meaning integration, did support the hypothesis; merged identity
significantly predicted meaning integration. This finding supports the argument that
important role-identities are likely potent sources of meaning and purpose in life (Papa &
Lancaster, 2015). According to the Cognitive Attachment Model, merged identity is
strongly associated with an individual’s ability to integrate, or make meaning, of a loss
(Maccallum, & Bryant, 2013). For an individual with a merged identity, the integration of
the loss is much more difficult. In this model, meaning integration is defined as the
integration of the loss into a revised identity that is not dependent on the deceased. This
can be a particularly difficult task when much of one’s goals are based on the deceased. It
requires making major adjustments to future plans and ideals.

In contrast to the results found with meaning integration, the results from the
second analysis using meaning in life indicated that merged identity did not significantly
predict meaning in life. Although it was expected there would be some relationship
between merged identity and meaning in life, this does not actually conflict with the
Cognitive Attachment Model. Specifically, the Cognitive Attachment Model discusses
meaning integration, not meaning in life. According to this model, the integral task of
grief is to integrate the event, or make meaning of it, in order to develop a new, or at least modified, sense of identity. The ISLES aims to measure this exact concept, while the MLQ does not measure meaning as an integration of an event. Therefore, the results remain consistent with the theory’s view on meaning and identity after the death of a loved one.

There seems to be three main domains or dimensions of meaning throughout the literature: comprehension, purpose, and significance (Steger, 2012; Martela & Steger, 2016). Comprehension is considered the ability to make sense of one’s life, including in relation to the external world and how one fits within it. This very much relates to meaning integration as it has been defined in the current study. Purpose, on the other hand, is more overarching, and considers long-term goals and aspirations (Steger, 2012). This relates more to the meaning in life construct. Furthermore, it is important to consider how our relationship with others helps to establish a sense of meaning and purpose in life. If we lose an important loved one, it is possible this will affect our general feeling of purpose in life, which might account for the results in the current study. It is possible that by eliminating a source of purpose and meaning in life through the death of a loved one, the relationship between meaning in life and merged identity is diminished.

**Merged Identity, Meaning Integration, and Grief**

Merged identity predicts, meaning integration and grief have been linked in previous research. An individual with a merged identity will have more difficulty integrating and making sense of a loss. Furthermore, merged identity has been associated with more severe and prolonged grief symptoms. However, little research has been done to evaluate the relationship between the three variables concurrently. The fifth aim of the
study was based on the reasoning that with the death of a loved one will greatly impact one’s sense of self if the individual’s identity was merged with that of the deceased (Maccallum & Bryant, 2013). In turn, the bereaved will have a more difficult time integrating the loss, and therefore, suffer from more intense grief symptoms. The mediation analysis provided some support for this hypothesis.

The analysis found that merged identity significantly predicted meaning integration and grief. Furthermore, meaning integration significantly predicted grief. Specifically, those with a more merged identity with the deceased had less integration of the loss and had made less meaning of the event, and therefore had more severe grief symptoms. With a significant total effect and a significant indirect effect, these results indicate that meaning integration may be one pathway through which merged identity leads to grief. Meaning integration served as a partial mediator for the relationship between merged identity and grief. Cognitive Attachment Theory suggests there are several factors impacted by one’s identity that may determine someone’s ability to cope with grief. It seems meaning integration may be just one part of the story; there are other variables to continue exploring, including autobiographical memory recall, self-concept, emotion regulation, and self-confidence (Maccallum & Bryant, 2010). Given the lack of research on meaning integration, merged identity, and grief simultaneously, these results may be very significant to researchers who want to understand the constructs in more depth.

**Merged Identity, Identity Disruption, Identity Continuity, and Grief**

The sixth aim of the study was based on the idea that the death of a loved one will greatly impact one’s merged identity, which will lead to a more disrupted sense of self
after a loss. This disruption will ultimately lead to more severe or prolonged grief symptoms as the individual may struggle to develop a new sense of self (Maccallum & Bryant, 2013). Since identity disruption was measured with both the Identity Disruption Scale and a proxy measure, the Self-Continuity Index, two mediational analyses were run.

The initial analysis including identity disruption found that merged identity significantly predicted identity disruption and grief. Furthermore, identity disruption significantly predicted grief. Specifically, those with a more merged identity with the deceased experienced more disruption in their identity, and therefore had more severe grief symptoms. With a significant total effect and a significant indirect effect, these results indicate that identity disruption may be another pathway through which merged identity leads to grief. Identity disruption served as a partial mediator for the relationship between merged identity and grief.

As previously mentioned, disrupted identity may influence and change how one views the world and their relationships with others (Maccallum & Bryant, 2003; Maccallum & Bryant, 2013). There are reasons to believe that the degree to which an individual’s identity is merged with the deceased is an important factor in the development of grief symptoms. Again, the focus of the Cognitive Attachment Model is on the specific relationship with the deceased, and not general attachment style. Thus, focusing on the level of disruption based on the specific relationship and degree to which the identities are merged will allow for a better prediction of grief symptoms.

Again, Cognitive Attachment Theory suggests there are several factors impacted by one’s merged identity that might determine grief symptoms. Identity disruption, like
meaning integration, is one part of the story; there are other variables to continue exploring. There has been an abundance of literature on other risk factors related to grief symptomology that may be playing a role in this relationship.

The results from the regression analysis using identity continuity indicated that a merged identity led to higher scores in identity continuity and, subsequently, lower grief severity. This result was surprising as it was expected that a merged identity would predict lower continuity. As discussed previously, the inconsistent results using the Self-Continuity Index might be due to the poor validity of the scale as a measure for identity continuity as defined in the current study (see page 83). It is possible that the Self-Continuity Index is more accurately measuring the bereaved’s connection with the deceased. It would make sense that someone with a merged identity would benefit from maintaining a connection with the deceased. By remaining connected, these individuals may actually experience a reduction in grief severity as compared to individuals with a merged identity who are unable to maintain that connection. Individuals with a merged identity have goals, motivations, and plans that are intertwined with the deceased. By feeling connected to the deceased, there may be less need to adjust goals, motivations, and plans, and thus, the loss can be more easily integrated into the bereaved’s meaning system. The finding is interesting as it may tell us more about what might buffer against the development of more severe or prolonged grief symptoms. It also can shed some light on how maintaining a continuing bond might be beneficial for those individuals with a merged identity.
Merged Identity, Meaning Integration, Identity Disruption, Identity Continuity and Grief

Finally, this study attempted to answer the question, how do these variables, merged identity, meaning integration, identity disruption, identity continuity, and grief, all fit together? Based on the literature finding merged identity, lack of meaning and integration of a loss, and disrupted identity as all being related to the development of grief symptoms, this study proposed that the relationship between merged identity and grief is sequentially mediated by meaning integration and identity disruption/identity continuity. Specifically, those with a merged identity will experience less meaning integration of the loss, which will result in a more disrupted identity, which will eventually lead to more severe grief symptoms. A sequential mediational hypothesis was established because these variables seemed to be linked in a chain. The degree to which an individual’s identity is merged with the deceased is dependent on the following: how much the relationship with the deceased dominated how the person viewed themselves; the extent to which significant goals, motivations, roles, and future plans were shared with the deceased; and the extent to which the deceased met the emotional or attachment needs of the bereaved. Therefore, it is easy to imagine how someone with a merged identity would have trouble integrating the loss considering how much of their own identity and future was based on the deceased. This difficulty integrating the loss will then lead to a more disrupted sense of self. Finally, by having a more disrupted sense of self after a loss, it makes sense that this individual will have more severe grief symptoms.

As with previous analyses, two measures of identity disruption were used. In conjunction with previous findings, the hypothesis was supported with the analysis
completed using identity disruption, but not with identity continuity. Results including identity disruption indicated that merged identity was indirectly and positively associated with grief sequentially mediated first through meaning and then identity disruption. Specifically, a more merged identity predicted less meaning integration, which predicted more identity disruption, which finally predicted more grief. These results align with the Cognitive Attachment Model.

This finding offers a theoretical model and empirical basis for explaining the link between merged identity and grief. Although meaning integration and identity disruption are recognized to be significant in predicting grief, research including the four variables at once has received little attention. This study highlights that the pathway by which individuals with a merged identity develop more severe grief symptoms includes two important mediating variables, meaning integration and identity disruption.

Bereaved individuals who a more merged identity with the deceased, are less likely to be able to integrate the loss and find meaning in the event. Further, this reduction or lack of meaning then translates into a more disrupted identity, leading to worse grief symptoms. By identifying the serial mediating roles of meaning integration and identity disruption in the link between merged identity and grief, this study provides important empirical support for why and how people respond to the loss of a significant other.

**Implications of Findings for Mental Health Counselors**

This study has several practical implications for mental health counselors. Although most grieving individuals return to normal daily functioning within the first 2 years following the death of a loved one (Neimeyer, Burke, Mackay, & Stringer, 2010),
about 10-15% of bereaved individuals do not return to daily functioning and, instead, suffer from prolonged and complicated grief (Neimeyer & Thompson, 2014; Boyraz, Horne, & Waits, 2015). Therefore, research on grief and the underlying mechanisms that play a role in the development of severe grief symptoms is important for clinicians. This is especially important considering the disagreement about the general effectiveness of grief therapy itself (Mancini, Bonanno, & Griffin, 2012).

This study has highlighted important factors clinicians should consider when treating bereaved clients. Specifically, counselors should concern themselves with bereaved client’s sense of identity post-loss and their ability to integrate the event. As stressed above, individuals tend to have more difficulty grieving according to their meaning system and degree of identity disruption. Since a bereaved’s ability to integrate the loss seems to be crucial for better grief outcomes, counselors should implement techniques that assist in creating meaning integration. It is important to understand the bereaved’s identity in relation to the deceased, as this will provide guidance on the degree to which the bereaved’s identity was merged with the deceased. Given the findings, those with a more merged identity will have more difficulty grieving as they will experience greater disruption of their identity post-loss. Counselors can assist clients in reducing disruption by integrating the loss into the client’s global meaning system.

As previously mentioned, there are certain therapeutic techniques and approaches that focus on these exact tasks. Meaning reconstruction has been defined as a process of changing and adapting the self-narrative, occurs at various levels, including personal, biological, and interpersonal (Neimeyer et al., 2014; Neimeyer & Thompson, 2014). This involves searching for ways to make sense of the loss, to understand why it occurred, to
determine what the loss means within our lives, and to decide how the loss will be integrated into our current narratives (Gillies & Neimeyer, 2006). Constructivist theory argues there are core beliefs and assumptions about ourselves, others, and the world, which serve as the foundation for our narratives. The death of a loved often challenges these core beliefs and worldviews that were developed before the loss (Neimeyer et al., 2010). Narratives of the loss are important for posttraumatic growth, and telling these stories to others may be therapeutic (Tedeschi & Calhoun, 2004). According to the Cognitive Attachment Model, the integral task during bereavement is the modification and adjustment of identity to incorporate the loss and, therefore, enable the establishment of new goals, life roles, and attachments independent of the deceased (Maccallum & Bryant, 2013). Therefore, counselors can focus on helping and encouraging clients to establish these new goals and life roles.

Another important implication is counselor’s treatment of clients prior to the death of a loved one. For clinicians working with clients with terminally ill loved ones, it can be important to implement these techniques prior to the loss. This is also relevant for counselors working in hospice or end-of-life care programs. As the results indicated, a merged identity might be the catalyst for the development of more severe grief symptoms in the future. Therefore, clinicians can work with clients on developing an independent sense of self prior to the death of the loved one. By working on decreasing the degree to which the client’s identity is merged with the deceased, the client may develop less severe grief symptoms. It is important for clinicians to assist and guide clients in setting new goals, future plans, and roles separate from the terminally ill loved one. Again, an independent identity does not suggest the client does not love or admire the loved one,
instead it means the client will have established a sense of self that will remain more stable beyond the death of the loved one (Maccallum, & Bryant, 2013).

The current study’s findings highlight the need for continued research on the link between merged identity, meaning integration, identity disruption, and grief, particularly as they relate to mental health. Considering the implications of the study, and the impact of merged identity on grief, it is crucial to understand the mechanisms underlying relationship. This information is critical for mental health counselors, especially in their treatment of bereaved and terminally ill clients.

Limitations and Suggestions for Future Research

Although there are a number of important findings in the current research, there are limitations that should be considered. First, the current study included a large sample of bereaved participants, however there were overwhelmingly more participants who reported the death of a sibling or child. This problem may be corrected by studying a larger sample or limiting participation to those who have experienced the death of a spouse. This is an important relationship to consider, especially when studying the degree to which the bereaved’s identity is merged with the deceased. It is common for spouses to create future goals and plans based around one another. Therefore, this group may be more vulnerable to the development of a merged identity, and eventually, more severe grief. The results of this study would be more generalizable to the population of bereaved spouses if it included more widows and widowers. One of the unique aspects of this study was that data was collected using Amazon’s Mechanical Turk. This allowed for the collection of data from a larger sample in a shorter period of time. If this study was expanded, for example, by paying more participants, or setting up separate Human
Intelligence Tasks (HITs) based on the relationship to the deceased, it is possible there would have been a more balanced sample.

Another important consideration is that the current study was cross-sectional in nature, thus making it difficult to determine conclusively cause and effect. While correlational research can be critical in understanding the relationship between variables and the underlying mechanisms of grief, it only suggests that a relationship exists between the variables, not that one causes a change in the other. The assumptions of the current study are that merged identity and identity disruption are important to determining grief and meaning integration. Even with a strong correlation, it is not possible to prove causation. It is possible that an individual’s grief symptoms caused disturbances in identity. To further evaluate the relationships between the listed variables, a longitudinal design would be critical. Although using a longitudinal design might pose obvious practical challenges, these studies would be able to reveal measurable differences from pre-loss functioning.

Although MTurk is an incredible tool for collecting data, it has its own set of limitations. MTurk offers increased anonymity to its users, which means there is a potential for individuals to lie about their demographic background (Smith et al, 2015). Since participants are being paid, it increases the chance they may lie to be able to participate in a study to receive reimbursement. To reduce the risk of participants lying about the eligibility requirements for the study, a screening tool was used. However, in the screening tool, participants did not report the time since loss. Future studies should consider adding this in as part of the screening questionnaire. It is also possible to ask
several demographic and preliminary questions before allowing the participants to be part of the study (Smith et al., 2015).

Additional concerns involve the nature of the instruments used in the study. The scales are based on self-report, and while participants were guaranteed anonymity, there remains the possibility that their responses were influenced by social desirability. Furthermore, the Identity Disruption Scale yielded a low internal consistency. It is possible this may have affected some of the results in the current study. Also, the Self-Continuity Index yielded surprising results. It is possible that, considering the items more closely, the scale might be measuring connectedness with the past and the deceased, not identity disruption as defined in the current study. Thus, future researchers might consider eliminating or replacing the Identity Disruption Scale and Self-Continuity Index with more validated and reliable measures of identity disruption as defined in the current study.

Finally, while this study took a particular interest in the relationship between merged identity, meaning, identity disruption, and grief, there may have been other variables worth further exploration. Although participants were asked about the nature of the death, more information on the cause of death may have been useful. Previous research has shown a link between the deceased dying from violent or unexpected causes and complicated grief. Individuals who experience more violent losses (e.g., murder, car accident, etc.) report more difficulty adjusting after the death (Boyraz, Horne, & Sayger, 2012). The current study only included one question regarding the cause of death being natural, but did not ask for more details. Future researchers might benefit from having more information regarding the cause of death, as this may be playing a role in the
relationship between the study variables. Furthermore, it may be important to consider more about the relationship to the deceased. Analyses did not consider years of marriage, age of child, or age of sibling. These are important factors that may impact the development of a merged identity. For example, spouses married for a longer period of time may experience a more merged identity than newlyweds. Another important factor related to meaning might be the individual’s perception of death, in general. This might affect the individual’s grief process.

Despite the listed limitations, the current study adds to the literature on grief in numerous ways. The findings support the hypothesis that merged identity is associated with meaning integration, identity disruption, and grief. However, what is most interesting is the support the study provides for the Cognitive Attachment Model, which has received little empirical support to this point. It is important to understand the chain reaction from merged identity to grief. There is much more research that must be done in order to further understand the relationship. Further study is warranted on the mechanisms that support the development of grief, including variables not considered in the current study. While most of the hypotheses in the current study were supported, it is imperative for researchers to replicate the findings with different samples and bereaved populations. As previously mentioned, there are various ways clinicians can use these studies as a basis for their treatment approach with grieving clients.
References


Coifman, K. G., & Bonanno, G. A. (2010). When distress does not become depression:


A comprehensive evaluation of the 'Inclusion of the Other in the Self' scale. *Plos One*, 10(6), 1-19. doi:10.1371/journal.pone.0129478


first two years of bereavement: The role of sense-making and benefit-finding.


significance: A mixed methods examination of meaning making after the loss of

Maccallum, F., & Bonanno, G. A. (2017). The economics of losing a loved one: Delayed
reward discounting in prolonged grief. *Clinical Psychological Science*, doi
10.1177/2167702615605827

Maccallum, F., & Bryant, R. A. (2010). Impaired autobiographical memory in

Maccallum, F., & Bryant, R. A. (2013). A cognitive attachment model of prolonged grief:
Integrating attachments, memory, and identity. *Clinical Psychology Review,
33*(6), 713-727.

among symptoms of prolonged grief following spousal and parental loss. *Journal

resilience, and recovery among bereaved spouses. *Journal Of Clinical
Psychology, 71*(12), 1245-1258. doi:10.1002/jclp.22224

meaning-making in the turning point narratives of emerging adults.

*Developmental psychology, 42*(4), 714.

Meaning making during parent-physician bereavement meetings after a child’s

parents’ outcomes 4 to 60 months after their children’s deaths by accident, suicide, or homicide: A comparative study demonstrating differences. *Death Studies, 27*(1), 39-61.


Papa A., Bonanno GA. 2008. Smiling in the face of adversity: interpersonal and
intrapersonal functions of smiling. *Emotion* 8:1–12


Perkins W., Harris LB. Familial bereavement and health in adult life course perspective, J Marriage Fam , 1990, vol. 52 1(pg. 233-241)


Shear, M. K. (2012). Grief and mourning gone awry: Pathway and course of complicated


Thoits, P. A. (2012). Role-Identity Salience, Purpose and Meaning in Life, and Well-

doi:10.1177/0190272512459662


APPENDIX A: DEMOGRAPHIC CHARACTERISTICS

1. Age: _________
2. Gender:
   a. Male
   b. Female
3. What is your race/ethnicity? ____________________________
4. What is the highest grade or year of school you completed?
   a. High school graduate
   b. College 2-4 years (College graduate)
   c. Graduate School (Advance Degree)
   d. None of the Above
5. What is your relationship to the deceased?:
   a. Deceased was my child
   b. Deceased was my spouse/partner
   c. Deceased was my sibling
   d. Other: ______________________
6. Did the deceased die of natural causes?
   a. Yes
   b. No
   c. Unsure
7. How long ago did the deceased die (in months)? ____________
8. Have you had any interventions for your grief:
   a. Medication
   b. Therapy
   c. Other ________________
   d. None
APPENDIX B: LIFE EVENTS QUESTIONNAIRE (LEQ)

Have you experienced any of the following significant life events in the past 2 years (select all that apply). If so, please indicate when the event occurred and whether or not it has caused ongoing distress.

a. Retirement  
b. Marriage  
c. Death of a Parent  
d. Death of a Spouse  
e. Death of a Child  
f. Death of a Pet  
g. Death of a Sibling  
h. Death of a Grandparent  
i. Death of a friend  
j. Death of an aunt/uncle  
k. Death of a Cousin  
l. Move  
m. Job Loss  
n. Divorce  
o. Child Birth
APPENDIX C: PROLONGED GRIEF-13 (PG-13)

PART I INSTRUCTIONS: FOR EACH ITEM, PLACE A CHECK MARK TO INDICATE YOUR ANSWER.

1. In the past month, how often have you felt yourself longing or yearning for the person you lost?
   ______ 1 = Not at all
   ______ 2 = At least once
   ______ 3 = At least once a week
   ______ 4 = At least once a day
   ______ 5 = Several times a day

2. In the past month, how often have you had intense feelings of emotional pain, sorrow, or pangs of grief related to the lost relationship?
   ______ 1 = Not at all
   ______ 2 = At least once
   ______ 3 = At least once a week
   ______ 4 = At least once a day
   ______ 5 = Several times a day

3. For questions 1 or 2 above, have you experienced either of these symptoms at least daily and after 6 months have elapsed since the loss?
   ______ No
   ______ Yes

4. In the past month, how often have you tried to avoid reminders that the person you lost is gone?
   ______ 1 = Not at all
   ______ 2 = At least once
   ______ 3 = At least once a week
   ______ 4 = At least once a day
   ______ 5 = Several times a day

5. In the past month, how often have you felt stunned, shocked, or dazed by your loss?
   ______ 1 = Not at all
   ______ 2 = At least once
PART II INSTRUCTIONS: FOR EACH ITEM, PLEASE INDICATE HOW YOU CURRENTLY FEEL. CIRCLE THE NUMBER TO THE RIGHT TO INDICATE YOUR ANSWER.

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Slightly</th>
<th>Somewhat</th>
<th>Quite a bit</th>
<th>Overwhelmingly</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Do you feel confused about your role in life or feel like you don’t know who you are (i.e., feeling that a part of yourself has died)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Have you had trouble accepting the loss?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Has it been hard for you to trust others since your loss?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Do you feel bitter over your loss?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Do you feel that moving on (e.g., making new friends, pursuing new interests) would be difficult for you now?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Do you feel emotionally numb since your loss?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Do you feel that life is unfulfilling, empty, or meaningless since your loss?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

PART III INSTRUCTIONS: FOR EACH ITEM, PLACE A CHECK MARK TO INDICATE YOUR ANSWER.

13. Have you experienced a significant reduction in social, occupational, or other important areas of functioning (e.g., domestic responsibilities)?

_____ No   _____ Yes
APPENDIX D: INTEGRATION OF STRESSFUL LIFE EXPERIENCES SCALE (ISLES)

Please indicate the extent to which you agree or disagree with the following statements with regard to your recent loss. Read each statement carefully and be aware that a response of agreement or disagreement may not have the same meaning across all items.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Since this loss, the world seems like a confusing and scary place.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I have made sense of this loss.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. If or when I talk about this loss, I believe people see me differently.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I have difficulty integrating this loss into my understanding about the world.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Since this loss, I feel like I’m in a crisis of faith.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. This loss is incomprehensible to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. My previous goals and hopes for the future don’t make sense anymore since this loss.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I am perplexed by what happened.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Since this loss happened, I don’t know where to go next in my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I would have an easier time talking about my life if I left this loss out.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. My beliefs and values are less clear since this loss.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I don’t understand myself anymore since this loss.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Since this loss, I have a harder time feeling like I’m part of something larger than myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. This loss has made me feel less purposeful.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. I haven’t been able to put the pieces of my life back together since this loss.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. After this loss, life seems more random.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: This adapted version of the ISLES is reproduced with permission from Holland et al., 2010. The scale has been slightly modified from its original form to make it more relevant for bereaved individuals (i.e., the word “loss” is substituted for the word “event”). With the exception of item 2 (which should be reverse scored), all items should be scored using the 1 (Strongly agree) to 5 (Strongly disagree) format presented above. A sum of all items can be taken to compute a total ISLES score. Likewise, items 1, 3, 5, 7, 9, 11, 12, 13, 14, 15, and 16 can be summed to compute the Footing in the World subscale, and items 2, 4, 6, 8, and 10 can be summed to compute the Comprehensibility subscale.
**APPENDIX E: MEANING IN LIFE QUESTIONNAIRE (MLQ)**

Please take a moment to think about what makes your life and existence feel important and significant to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers. Please answer according to the scale below:

<table>
<thead>
<tr>
<th>Absolutely Untrue</th>
<th>Mostly Untrue</th>
<th>Somewhat Untrue</th>
<th>Can't Say True or False</th>
<th>Somewhat True</th>
<th>Mostly True</th>
<th>Absolutely True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

_____1. I understand my life’s meaning.

_____2. I am looking for something that makes my life feel meaningful.

_____3. I am always looking to find my life’s purpose.

_____4. My life has a clear sense of purpose.

_____5. I have a good sense of what makes my life meaningful.

_____6. I have discovered a satisfying life purpose.

_____7. I am always searching for something that makes my life feel significant.

_____8. I am seeking a purpose or mission for my life.

_____9. My life has no clear purpose.

_____10. I am searching for meaning in my life.

**Scoring:**
Item 9 is reverse scored.
Items 1, 4, 5, 6, & 9 make up the Presence of Meaning subscale
Items 2, 3, 7, 8, & 10 make up the Search for Meaning subscale
Scoring is kept continuous.
Which diagram best describes your relationship with the deceased?
APPENDIX G: SUBJECTIVE CLOSENESS INDEX (SCI)

1. Relative to all your other relationships (both same and opposite sex) how would you characterize your relationship with the deceased?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all close</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Very close</td>
</tr>
</tbody>
</table>

2. Relative to what you know about other people’s close relationships, how would you characterize your relationship with the deceased?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all close</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Very close</td>
</tr>
</tbody>
</table>
### APPENDIX H: THE EXPERIENCES IN CLOSE RELATIONSHIPS-REVISED QUESTIONNAIRE (ECR-R)

The statements below concern how you feel in emotionally intimate relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by circling a number to indicate how much you agree or disagree with the statement.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>1= Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I’m afraid that I will lose my partner’s love.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I often worry that my partner will not want to stay with me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I often worry that my partner doesn’t really love me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I worry that romantic partners won’t care about me as much as I care about them.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I often wish that my partner’s feelings for me were as strong as my feelings for him or her.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I worry a lot about my relationships.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. When my partner is out of sight, I worry that he or she might become interested in someone else.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. When I show my feelings for romantic partners, I’m afraid they will not feel the same about me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I rarely worry about my partner leaving me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. My romantic partner makes me doubt myself.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. I do not often worry about being abandoned.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I find that my partner(s) don’t want to get as close as I would like.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Sometimes romantic partners change their feelings about me for no apparent reason.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. My desire to be very close sometimes scares people away.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. It makes me mad that I don’t get the affection and support I need from my partner.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. I worry that I won't measure up to other people.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. My partner only seems to notice me when I’m angry.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. I prefer not to show a partner how I feel deep down.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. I feel comfortable sharing my private thoughts and feelings with my partner.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. I find it difficult to allow myself to depend on romantic partners.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. I am very comfortable being close to romantic partners.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. I don't feel comfortable opening up to romantic partners.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
24. I prefer not to be too close to romantic partners. & 1 & 2 & 3 & 4 & 5 & 6 & 7  
25. I get uncomfortable when a romantic partner wants to be very close. & 1 & 2 & 3 & 4 & 5 & 6 & 7  
26. I find it relatively easy to get close to my partner. & 1 & 2 & 3 & 4 & 5 & 6 & 7  
27. It’s not difficult for me to get close to my partner. & 1 & 2 & 3 & 4 & 5 & 6 & 7  
28. I usually discuss my problems and concerns with my partner. & 1 & 2 & 3 & 4 & 5 & 6 & 7  
29. It helps to turn to my romantic partner in times of need. & 1 & 2 & 3 & 4 & 5 & 6 & 7  
30. I tell my partner just about everything. & 1 & 2 & 3 & 4 & 5 & 6 & 7  
31. I talk things over with my partner & 1 & 2 & 3 & 4 & 5 & 6 & 7  
32. I am nervous when partners get too close to me. & 1 & 2 & 3 & 4 & 5 & 6 & 7  
33. I feel comfortable depending on romantic partners. & 1 & 2 & 3 & 4 & 5 & 6 & 7  
34. I find it easy to depend on romantic partners. & 1 & 2 & 3 & 4 & 5 & 6 & 7  
35. It’s easy for me to be affectionate with my partner. & 1 & 2 & 3 & 4 & 5 & 6 & 7  
36. My partner really understands me and my needs. & 1 & 2 & 3 & 4 & 5 & 6 & 7

Scoring Information: The first 18 items above comprise the attachment-related anxiety scale. Items 19 – 36 comprise the attachment-related avoidance scale. In real research, the order in which these items are presented should be randomized. To obtain a score for attachment-related anxiety, please average a person’s responses to items 1 – 18. However, because items 9 and 11 are “reverse keyed” (i.e., high numbers represent low anxiety rather than high anxiety), you’ll need to reverse the answers to those questions before averaging the responses. (If someone answers with a “6” to item 9, you’ll need to re-key it as a 2 before averaging.) To obtain a score for attachment-related avoidance, please average a person’s responses to items 19 – 36. Items 20, 22, 26, 27, 28, 29, 30, 31, 33, 34, 35, and 36 will need to be reverse keyed before you compute this average.
APPEDNIX I: IDENTITY DISRUPTION

Please indicate the extent to which you agree or disagree with the following statements with regard to your recent loss. Read each statement carefully and be aware that a response of agreement or disagreement may not have the same meaning across all items.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>1= Not at all True</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I can still pretty well put myself in my own shoes from how I was before the loss.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. When I think back to how I was before the loss, it feels a little unfamiliar.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. When I look at pictures of myself before the loss, it feels a little unfamiliar.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I have the feeling that at the core I am the same person I was before the loss.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX J: SELF CONTINUITY INDEX (SCI)

Please indicate the extent to which you agree or disagree with the following statements with regard to your recent loss. Read each statement carefully and be aware that a response of agreement or disagreement may not have the same meaning across all items.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Thinking about this loss makes me feel connected with my past.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Thinking about this loss makes me feel connected with who I was in the past.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Thinking about this loss makes me feel important aspects of personality remain the same across time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Thinking about this loss makes me feel there is continuity in my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>